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ANNAMALAI UNIVERSITY

DIRECTORATE OF DISTANCE EDUCATION

OPEN UNIVERSITY SYSTEM

75 ADMISSION NOTIFICATION FOR THE YEAR 2003-2004

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No formal educational qualification is required

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Sociology*	English
Tamil	Population Studies*
Public Administration*	
Political Science*	

M.Com.

Co-operative Management*/Banking and Insurance Management*

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Application form for all programmes will be issued upto 21.07.2003 The last date for receipt of filled-in application is 21.07.2003

SPOT SELECTION: Spot selection for admission to the preparatory programme is made through all our Study Centres for all programmes. *Those who passed the Entrance Test during 2000-2001, 2001-2002 & 2002-2003 but not joined the programmes are also eligible for admission by sending 2003-2004 application without undergoing the Entrance Test*

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The National Assessment and Accreditation Council has accredited Annamalai University at the FOUR STAR LEVEL among the Universities.

Dr. M. ARUMUGAM
DIRECTOR

Dr. M. RATHINASABAPATHI
REGISTRAR

PLACE: Annamalainagar

DATE. 20.04.2003

IN THIS ISSUE

Autonomy in Government Colleges: Is It Real?

Raja Mutthirulandi
(Postgraduate Department of English, Periyar EVR College (Autonomous) Tiruchirapalli-620023)

In India, about one-fourth of the total number of colleges are the Government colleges. Tamil Nadu has 67 Government colleges including seven Colleges of Education, with about two lakh students, 3,500 teachers and 2,500 non-teaching staff members. The Government colleges are 'owned and managed by the Government' and are also 'married by affiliation' to one or the other university in whose jurisdiction they lie. 'Autonomy' in colleges brings in a third master- the University Grants Commission (UGC)- to the scene.

During the late 90s, the Government of Tamilnadu started showing enthusiasm to confer 'Autonomous status' to certain Government colleges with a declared aim 'to make thorough professionals of each and every student to suit the present needs of the society' (Policy Note on Higher Education, Government of Tamilnadu, 1999-2000). 'To attain this objective' the policy note of the Government promised that, 'the course curriculum would be suitably modified with reference to various subjects of academic study.' Academics interested in innovation and excellence hoped that such a measure of introduction of autonomy in Government colleges, if carried out in letter and spirit, would usher in decentalisation of planning, management and decision-making; greater possibilities for purposeful, newer curriculum, improved methodologies and better evaluation; democratization of the academic environment in a strict, outdated hierarchical Government system. It was also thought that there would be freedom to explore new grounds to achieve regional relevance, social justice and excellence in education. But the Teachers' Unions showed vehement opposition for the introduction of autonomy in Government colleges. The Government went ahead with its proposal simply brushing aside opposition of the Teachers' Unions against autonomy.

It is true that the demand for autonomy in Government colleges did not stem from 'within', but 'came from above' which is itself a fundamental contradiction to the concept of autonomy and UGC's scheme of conferring autonomous status to colleges! Hopes of the votaries of Autonomous Colleges remain unfulfilled and the initial resistance of the Teachers' Unions has also mysteriously faded out. But the teachers in Autonomous Government Colleges should be credited for accepting the academic responsibility. They did not do anything to sabotage the working of autonomy and have so far shown best possible sincerity working under great constrains—systemic, local-specific and other.

The mission of the Government colleges is to cater to the educational needs of those hailing from the poorer, rural and socially, economically

and educationally marginalized sections of the society. Social-justice policies in matters like admission providing adequate reservations to students hailing from such disadvantaged sections of the society are followed in Government colleges. There is an observation that 'Government colleges are like Government Hospitals'—only the poor and the neglected who cannot afford better services go there. (Subramanyam, K-1996). This observation cannot be ignored. The example of student composition in an (Autonomous Government college)? situated within the limits of Tiruchirapalli Corporation would reveal who the 'clients' are. About 46% of the above Autonomous Government College are from the SC and ST communities; more than 68.6% of the learners have come to its fold from rural and backward areas seeking the benefits of higher education. Further to this, about 73.7% of the boys and girls of the college belong to families of lower and lower-middle income groups.

Matters like location of the college, policies and criteria of admissions, fee structure for courses, introduction of new, socially relevant academic programmes, recruitment of sufficient number of qualified staff for handling such courses, filling up of vacancies (teaching and non-teaching), creation of basic infrastructure in respect of Government colleges—whether autonomous or otherwise—are decided 'elsewhere' and the local units (individual Government colleges) have least say in these matters. Under such an environment, the Autonomous Government Colleges have very little to do about these matters. Execution of construction, maintenance and repair works in Government colleges lie in the perennial bottlenecks characteristic to PWD practices.

The variety and complexity of the tasks to be performed by the institutions of higher education demand an inescapable interdependence among the management, administration, faculty, students and others. It calls for adequate consultations and communication among these components.

Understanding, based on community of interest and carrying out joint efforts is very essential for the academic institutions, and it is all the more applicable for Autonomous Government College. But the situations in Government colleges provide very minimal scope for such efforts. Legislative and executive governmental authorities, at all levels,

play deciding roles in the making of important decisions relating to Government colleges, including academic policies of these institutions. Diversity and distinctive missions for each institution is not a recognized factor and so they have not been encouraged, valued and fostered by the state and universities. No Autonomous Government college or other government college has any individual perspective plan for at least the next ten years. Regard for academic welfare and effective functioning of individual Autonomous Government colleges do not appear in the items for serious concern for executive authorities. Mindless adherence to 'routine', 'precedents', 'unplanned postings and transfers' of Principals and teachers are common occurrences in Government colleges. Posting of Principals and staff not exposed to any training or experience in autonomous institutions, even in the middle of the academic year is again a frequent happening in the 'overall scheme of things' affecting Autonomous Government colleges. Because of the uncertain tenure of the staff in the institutions, there is a total lack of commitment on the part of the Principals and staff. This explains why only lukewarm willingness is noticed in matters of undertaking any long-term project in Autonomous Government colleges.

Immediate filling up of staff vacancies has become a distant dream in Government colleges. As per a recent report (The Hindu, 26 Feb 2003), there are about one thousand teacher vacancies in Government colleges in Tamil Nadu. Compared to the total number of teachers, the current vacancy is one-third of the total staff strength. The Government deserves to be credited on one score-for 'equal treatment' of all colleges without showing any 'favoured status' to Autonomous Government Colleges in this and other vital matters of academic concern. There are Government colleges where nearly 50% of teaching positions are lying vacant or managed locally on adhoc basis through the 'detestable scheme of appointing lowly paid guest lecturers'. The widely prevalent adhocism and unorganised management of the situation (on a fire-fighting mode) through the scheme of poorly paid guest lecturers reflect another side of the 'poverty situations' under which the Government collegiate teachers have to girdle up their loins and strive for academic excellence!

Factors like frequent derailment of academic progress, seriously disrupting semester or non-semester schemes due to students and teachers' strikes have become common to Government colleges. Most often, student strikes crop up demanding local amenities etc. The Principals have no power and wherewithal to remedy the situation immediately. Staff strikes are 'claimed to be in the nature of demanding rightful benefits from the Government', and the Principals have nothing to do in bringing the academic work back to the rails except winking at 'the farce of compensation classes' after the periods of irreparable breakdown. Absence of clearly defined grievance redressal mechanism, for teachers and students in Government colleges plague the system and it's functioning. Mass exodus of staff for lucrative out side assignments is another unattended issue causing academic disruptions in autonomy in Government colleges. The Teachers' Unions which initially opposed autonomy, turned wise to become academic mercenaries. It is another fact that monetary gains from such sources and other extra earnings from manning contact classes of different universities are seldom shown in their income tax returns. The Principals, who are officers responsible for deduction of tax at source, as part of their strategy to buy local peace, just wink at such 'tax evasions' regularly practiced by these teachers. The Principals who sanction 'on other duty' (OD) leave for their teachers have full prior knowledge about where they go (to earn more) while on 'other duty', but just keep quiet when the teachers do not bring such extra income to their tax returns. Charity, not honesty, is the rule in government Colleges.

The autonomous status brings in the requirement of adhering to the UGC guidelines and follow its regulations. Though the Government colleges are owned and managed by the Government, 'to satisfy the UGC requirements for autonomy', every Autonomous Government College has 'ceremonial' bodies grandly named (misnomers!) as Executive Council and Governing Body. Besides these, there are other bodies like the Academic Council, Board of Studies, Planning Board, Finance Committee and so on... Elsewhere, the Executive Council (EC) or Governing Board (GB) of any institution, with few exceptions, acts as the final institute authority and

such institutions achieve progress. But in Autonomous Government Colleges in Tamil Nadu, the EC or GB is simply a nominated 'nominal body without any significant power'. Even the constitution of such bodies in Autonomous Government Colleges were shrouded in usual 'official secrecy' and were expertly carried out behind the backs of the academic staff, without any healthy process of internal consultations in the respective colleges. Certain vital committee like the Planning Board was not constituted at all in that Autonomous Government Colleges since 1998, the year of introduction of autonomy in that college. The mid-term review committee did not have time to look into these 'trivial matters' and seems to have spent more time on 'other things'.

Cheap desire of the colleges to earn 'more stars' through NAAC accreditation, as the star-status of the college is sought to be linked with UGC funding and fetish-like desires to cling for the continuation of autonomous status merely for 'pecuniary reasons' have driven certain colleges adopt very dubious means and practices to satisfy the visiting teams from NAAC, UGC etc. The shocking and recent revelations about a college in Palani (Dindigul District, TN) is only the tip of the iceberg indicating highly deplorable means adopted by managements of colleges. It is a pity that Government institutions also attempt to imitate what greedy private managements do in matters of 'satisfying the visiting teams and keeping them in good humour'.

The requirement to satisfy all the masters drives Government colleges even adopt dishonest means 'to meet the need for the time being'. When these colleges petition for money and grants, they plead 'poverty of provisions and seek alms holding a bigger bowl'; but when they report about functioning of autonomy and facilities for academic activities, they shout from roof-tops holding high the flag of academic honesty, that every thing is fine and facilities are in plenty! For autonomous colleges, 'there should be a Planning Board' according to UGC stipulations. Prior to submission of any proposal to the UGC, the Planning Board of the college is expected to go through different proposals with due process of consultation with the staff of all the departments and formulate it for final submission to

the funding agency (UGC). The Principals certify, with their signatures and official seal, that the Planning Board has gone through the proposals and are approved.

'One of the avowed objectives of granting autonomy to colleges is to provide them with freedom and flexibility necessary for making curricular innovations' (Thangamuthu, C. 1993). In Government colleges everything is done as per the directives (often clothed as norms) of the 'authorities' controlling the institutions throughout the state. In reality, the Autonomous Government Colleges cannot move a millimeter beyond the prescriptions of the Education Department/ Directorate of Collegiate Education. Even when justification exists for change, the Autonomous Government Colleges cannot alter the age-old 'three-part system' in UG courses (if that system is in vogue in the affiliating university). There is a kind of dominance of staff interests like job security etc in matters like discarding unviable courses and so decisions like revamping the 'now irrelevant courses' become solely dependent on staff interests and governmental policies. Admission rules (and even dates relating to admissions) are retained in the province of the Government. Student-centred education and dynamic methods of teaching is not thought of or supported in the Autonomous Government Colleges functioning under 'directives' from above. Methods of evaluation, percentage between internal and external evaluations, what to evaluate in respect of each subject unit have so far been out of any serious consideration of Autonomous Government Colleges. The Government institutions work under a rigidly hierarchical system that no great innovation and 'adventure of ideas' gets encouraged. If they can, the Government colleges can embark upon academic innovation 'without any additional requirement of staff and facilities' and well 'within the frameworks already laid by the Government and the university!' This is the level of freedom and flexibility available in Autonomous Government Colleges.

The grand visions of autonomy and the existing stark realities remain yet unyoked in Government colleges, thus delaying real academic betterment and learner benefits. (Ref. Table). The Government colleges crowned 'autonomous' are not anywhere near in meeting the criteria for Healthy Practices listed out by NAAC for accreditation of institutions:

Table 1

Visions of Autonomy	/	Realities
Academic innovation	/	Structural Constraints created by Govt. and University
Academic Excellence	/	Absence of commitment, facilities and Regional Relevance
Evaluation- Internalisation	/	Apprehensions of credibility; University norms
Innovative teaching Methodologies	/	Absence of training, initiative, leadership, and mechanical requirement of completion of syllabi
Accountability	/	Evasion by teachers. No norms evolved for fixing responsibility.
Participatory decision-making	/	Continued alienation of teachers (more in government Colleges)

(Adopted with modifications from: Thangamuthu, C. 1993)

NAAC List of Healthy Practices: (Position in Autonomous Government Colleges in brackets)

(i) Credit system, examination reforms and modular curriculum (Not adopted in many Autonomous Government colleges).

(ii) Mission statement and goals (No perspective plans/ mission statements in Autonomous Government colleges).

(iii) Master plan for institutional growth (No individual master plan for Autonomous Government colleges).

(iv) Stakeholder feedback for functional improvement (Totally absent in Autonomous Government colleges).

(v) Innovations in management and communications (No change in the hierarchical system).

(vi) Quality enhancement strategies (No specific measure adopted in Autonomous Government Colleges).

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(vii) Complementary systems, self-financing/need-based courses. (No need based courses in AGC).

(viii) S. National / International linkages for teaching and research (Not at all in Autonomous Government colleges).

(ix) Industry linkages (Not attempted at all in Autonomous Government colleges).

(x) Chairs of excellence (unknown / not heard of by Autonomous Government colleges).

(xi) Teaching and research awards won by faculty, (If anything won, not due to autonomy).

The Autonomous Government Colleges have not so far developed 'programme specification' that identifies 'potential stopping-off points' and gives the intended outcomes of the programme in terms of (i) the knowledge and understanding that a student will be expected to have upon completion of the programme; (ii) key skills: communication, numeracy, the use of information technology that he would acquire during the programme; (iii) learning how to learn: cognitive skills, such as an understanding of methodologies or ability in critical analysis; subject specific skills, such as laboratory skills etc. (AACP Statement, 1966).

From what is stated above, there is ample justification to seriously ponder over the question whether autonomy in Government Colleges is real. To make matters worse and more confusing, the Government of Tamil Nadu has recently enacted a legislation for the wholesale conversion of all Government colleges in the state into Constituent Colleges of universities in whose territorial jurisdiction they lie. Autonomous status on select individual Government Colleges was thrust from above earlier, now all the Government colleges are thrust down the throats of universities without their asking for; the universities could neither swallow nor spit. No prior consultation took place between the universities and the Government in a matter like this having far-reaching consequences. When the autonomy of universities is violated with impunity in a wholesale manner, can there be real autonomy for the poor members of the system—the Government Colleges? Hoping that there could be some dawn of wisdom for attaining the objectives of autonomy and making autonomy real in the government colleges, the following suggestions are presented for serious consideration and sincere trial.

• *Decentralisation and Planning:* Effective planning demands the broadest possible exchange of information and opinion among the components of a college with external expert guidance and consultations wherever needed. The channels necessary for such communication should be established and maintained by joint endeavour of the components of government colleges-executive authorities, faculty, students and the public. All Autonomous Government Colleges should be asked to embark upon formulating detailed, realistic and strategic short term (year-wise for five years) and long term plans (10 to 15 years). The staff of each Autonomous Government Colleges should be actively involved in setting up targets and chalking out strategies.

• *Funding Policy:* The Government and the Funding Bodies, when allocating funds for development/ expansion of higher education, should give priority to those institutions that have demonstrated a commitment to widening participation and success. As a pilot project, colleges that enroll students from particularly disadvantaged localities should be allocated additional funds.

• *Principals:* The Principal of the college is the Chief Executive and Academic Head. His dual role requires an ability to convince his superiors and faculty regarding the educational views and concepts formulated internally. Posting of Principals to Autonomous Government Colleges should be under a special process within Government policy of postings and transfers. This is a most critical kind of decision that the Government should take. The selection of the academic and administrative chief at the college level—more particularly for Autonomous Colleges—should be under a cooperative process involving the 'prospects' and the Government. There should be a willingness on the part of both to provide/undergo necessary training and exposure in the concepts of autonomy, functioning of academic bodies, budgeting, curriculum development etc., prior to their posting in autonomous colleges. There should also be serious efforts to train the Principals at maximising the use of information technology for both effective and efficient management at the college and department

levels. There should also be fixed minimum tenures for Principals when they are posted to any Autonomous Government College. Those likely to retire, get shifted/promoted for a different position within a short period could be given 'paper promotion' and benefits (all that most of them want) and they need not be 'burdened with Principalship and management of Autonomous institutions'.

- *Freedom to Principals*: Government should give real freedom to the Principals in matters of constitution of committees by adopting democratic practices; acceptance of private donations/ endowments/sponsorship; forging effective relationships with industry and in organizing new innovative, socially relevant programmes. There should be enough arm-space for the Principals for greater interaction with the user community—both employers and the public—to create relevant programmes; to develop greater autonomy in a decentralised structure; to develop a professional management system that reflects true autonomous as well as accountability. It would even be worthwhile to think of forming Local College Welfare Committees for each Autonomy Government College involving prominent personalities, alumni, academics of repute, management experts counselors, sports coaches and the like.

- *Heads of Departments in Colleges:* In Government colleges, the headships of departments, reach the incumbents by mere 'seniority' and sheer 'accidents'. Such a 'seniority alone' concept characteristic of the hierarchical Governmental system seals off all possibilities for innovations at the micro level. The result is perennial asylum seekers in the state of *status quo*! The management, administration, and faculty in Government colleges should bear in mind that the department head has a special obligation to build a department strong in scholarship and teaching capacity and so they should try sound principles like 'the periodical rotation of headships' to facilitate new creative inputs. The heads of departments could be selected by a healthy process either by departmental election—without any room for union rivalries/ affiliations to get in—or by appointment following transparent norms and process of consultation with members of the department and of related departments. The head

of the department should serve for a stated term, without prejudice to reelection/ reappointment, after a cycle, by open procedures.

- *Faculty Involvement:* Appropriate measures for local grievance redressal and bodies for fuller faculty participation in the governance of the college is necessary. But in Autonomous Government Colleges there is no such attempt. In some private aided colleges, all the members of the departments constitute the board of studies for the courses they offer and a limited number of experts from outside are included. Such a practice is absent in Autonomous Government Colleges. After all, the faculty in Autonomous Colleges has the primary responsibility for such fundamental areas as curriculum, subject matter and methods of instruction, research and those aspects of student life in the institution.

- *Curriculum Development:* Staff members in Government Colleges lack expertise in the area of curriculum development. Skills in curriculum making are very much essential for at least those in Autonomous Government Colleges. In this age of a techno-scientific revolution, the pace of change taking place in the work place 'requires people to re-equip themselves, as new knowledge and new skills are needed for economies to compete, survive and prosper.' (AACP Statement). A lifelong career in one organisation is soon bound to become rare. People will need the knowledge and skills to control and manage their own working lives. No Autonomous Government College has taken effort to meet this aspect. These colleges should provide for members of the society 'to renew, update and widen their knowledge and skills throughout life'. Each Autonomous Government College should establish Curriculum Development Units and make them active and vibrant centres of improvements in curriculum, methods of teaching, materials preparation etc. The Curriculum Development Units should review the changing role of staff as a result of recent developments in education and the advent of Communication and Information Technology. They shall develop 'a system of kite marking to identify good computer-based learning materials' and co-ordinate such developments within the network of Autonomous Government Colleges for further development of such materials. Ours is a period of discontinuous change and the future

cannot be very easily forecast from the past. The policy based on 'more of the same' cannot be an option now and there is a pressing need for radical thinking and action.

- **Examination Reform Cells:** The Scheme of Autonomous Colleges envisages teachers in the colleges to decide the curriculum and conduct the evaluation of their students through systems of continuous and end of the course evaluations. The idea of Autonomy also involves more and more of internal evaluation of learners' performance. Apprehensions about credibility and norms of the affiliating universities act as burdens on Autonomous Colleges in the matter of giving increased weightages for internal evaluation. Teachers teaching the subjects in the autonomous institution may employ certain methodologies for attaining the objectives of the course and they shall be the best judges to evaluate learners' performance through continuous and terminal assessments. But in most of the Autonomous Government Colleges, in full neglect of the concepts underlying autonomy, evaluation by outsiders is favoured blindly. Examination reform units/cells should be established in each Autonomous Government College and they should have regular brainstorming for formulation of evaluation schemes, question banks, percentage of internal-external evaluation to be followed, standard practices in evaluation, declaration of results etc. Periodical reviews, modifications of practices and updating should also become part of the activities of these units.

- **Institution-industry Linkages:** All educational institutions, and more particularly the Autonomous Government Colleges should strive for meaningful linkages with user-agencies and industries in their locality and elsewhere. The Autonomous Government Colleges should identify opportunities to increase work experience 'on-the job training for their learners. In order to help learners gain work experience, the Government could, by working with representative employers and professional organizations, formulate schemes to assist the Autonomous Government Colleges to develop such opportunities for students.

- **Representation to Students:** The students are the most important constituent in the system. But the students do not at present have any significant voice in the Autonomous Government Colleges (and universities too!). This anomaly should be amended early and ways should be found to permit significant student participation within the limits of attainable effectiveness. The institutions should review, on a regular basis, the services offered to the students and make appropriate measures to meet the needs of all sections of students. With the aim of nursing democratic culture, students' unions with well-defined constitutions should be permitted and their functioning should be regulated in strict adherence to the constitutions. Autonomous Government Colleges should not hesitate to offer representation for students in decision-making bodies like the Academic Council, Boards of Studies etc (at least on an invitee status, to begin with). We should also take due note of the obstacles to such participation:' inexperience, untested capacity, transitory status and the inescapable fact that the other components of the institution are in a position of judgment over the students' (AACP Statement). These obstacles should not deter us moving in the direction of ensuring substantive contributions from the students, believing that they can contribute when they are responsibly involved in the process.

- **Participation of all Constituents:** Involvement of all key stakeholders of higher educational institutions in decision-making is recognized as imperative, and so arrangements to ensure decision-making participation of all the institutional components including representatives of parents should be ensured in Autonomous Government Colleges.

- **Ensuring Academic Progress:** The Principals and staff make liberal use of provisions for 'on other duty' (OD), leaves of all kinds, for earning from assignments of external examiners, contact classes of different universities and to go for more earning slots everywhere. Many of such teachers appear as 'visiting professors' in the Government institutions they serve! In autonomous in Government Colleges, the Principal should be able to ensure that regular academic work is not disrupted by frequent, department wise, mass

exodus for paper corrections and other lucrative university assignments- not only in the parent university but also outside the state. There should be an accepted formula governing the maximum permissible number of teachers at a time in each department who could be permitted to avail 'on other duty' with earning potentials. Exemptions could be given only for participation in academic seminars, workshops, trainings, refreshers etc.

- *Publication of Audited Statements of Accounts:* There is no system of publication of audited statements of Accounts and making vital information about receipts and expenditure to staff and students of Government colleges. There could be no justification in withholding such, information from the staff and students. Transparency should not be shunned in Autonomous Government Colleges and a workable procedure for annual publication of such information and its presentation in the Annual Staff Council shall be evolved.

- *The Library and Library Committee:* Library Committees in Autonomous Colleges should (be constituted wherever non-existing) assess the needs with reference to existing resources, emerging needs and potentials of the institution for suggesting a planned and methodical procurement of books, journals, CDs and educational films. The prevalent practice of distress purchase at the last minute of the financial year for exhausting funds should be totally given up. In most of the Government colleges, equipment and gadgets purchased under the guise of audio-visual education are permanently kept safely, intact (in packed conditions) for 'safety reasons' and such facilities also lie scattered in several departments without any idea of using them at all. All such 'idling, dormant facilities' should be brought to a general pool at the institutional level for effective use and benefit of the learners and teachers. The Library in the Autonomous Government College can also take audio-visual education-with all equipments, gadgets, CDs, films, etc—as an added part of its functioning, on the lines of American Information Resource Centers.

- *Alumni Contribution:* It would not be out of place to think of and develop a mechanism for graduates in work to make a flat rate contribution to their *alma mater.* The rate of such contribution could

be worked out on the basis of the divided average cost of education, tuition fee waivers enjoyed etc, through an 'income contingent mechanism'.

- *Council of Autonomous Colleges in Affiliating Universities:* The Council could also be the forum for sharing and pooling of information and outcomes of experience between Autonomous Colleges in each affiliating university. A state level forum of Autonomous Colleges could also be thought of.

- *Council for Arts and Humanities Education and Research:* The current thrust on Science and Technology, Information Technology areas. What is needed is a separate body, pragmatic policies, special funding programmes to support and promote meaningful education in Arts and Humanities. The government (at the Centre and State) should establish Arts and Humanities Education Research Council (AHERC) to take due care of education and research in this sector. Autonomous Government colleges shall also do well if they have separate Councils for Arts and Humanities education at the institutional level in order to develop balanced academic policies and programmes and setting up equal priorities for science and other educational programmes.

Government's willingness to relax hierarchy, visible initiatives for real academic freedom and flexibility, recognition of diversity among Autonomous Government Colleges and the institutions' preparedness to meet challenges through democratization of the process of internal consultation and participation of all the constituents can bring real autonomy to the Government Colleges termed 'Autonomous' at present! Havoc would have been already done to higher education and social justice, if we have to wait too long for such a happening.

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New Information Environment: A Challenge for Librarianship

Tariq Ashraf

(IILM, Lodhi Road, New Delhi-110003. E-mail: tariq@iilm.edu)

Driven by computers, satellites, laser beams and optic fibres, the information juggernaut is hurtling triumphantly towards the 21st Century. Whereas the Industrial Revolution took two centuries to run its course, the Information Revolution has done the job in just two decades. This has given rise to a new mythology of the information society, where 'Information Technology' *per se* is being presented as the new saviour of mankind, opening new vistas for the liberation of human sprit from the bondage of dull routine and the drudgery of mass production. In library literature in a variety of context phrases such as 'information age', 'global information economy', 'virtual library' information super highway' are appearing with considerable frequency. The stage has come when traditional type of library is fast becoming obsolete and meaningless, incapable of coping with the mass of knowledge. The very frequency of terms, as applied to computer-based technology and communication systems, and to organization strategies and structure, may have affected our alertness to the enormity of the fundamental changes that are emerging while also affecting our ability to see clearly what is indeed changing and, what remains essentially the same.

However despite all these revolutionary changes, the values that are the foundation of the library profession should remain the same into the next century. These values of service, quality, universal access and cooperation are not threatened unless librarians ignore them. The way in which these values are translated into operations and activities, will undergo substantial change.

The concept of information is ageless and there is, of course, no age that has not depended on information as a basic element in all components of society, including the underpinnings of the economy. What is the difference, then, in today's world that such hyperbole as 'information age', and the like is applied to information and, more specifically to information technology?

Furthermore, information technology has created a sense of urgency and has created new possibilities for the development of new products and delivery of services. At the same time, the impact of information technology in communication processes and connections has challenged the basic assumptions about organization structure, working relationships.

Some of the characteristics of the current and emerging information environment in which librarians will have to function include:

- Greater access to a range of information,

- Increased speed in acquiring information,

- Greater complexity in locating, analyzing, and linking information,

- Constantly changing technology,

- Lack of standardization of both hardware and, software,

- Continuous learning for users and library staff,

- Substantial financial investment for technology.

The reality, then, is that whatever labels, are used to describe the current environment, librarians need to find ways to respond effectively and innovatively to a very different landscape in meeting user expectations. This is needed if librarians and libraries are to flourish, or even survive, within their institutions.

Librarians need to see themselves and their libraries as providing bridges to the past and gateways to the future. They need to establish partnerships, coalitions, and connections—technological, personal and organizational-to ensure a central role in the twenty-first century.

Douglas Van Houweling (1999), said that "universities assemble people to work together in the creation of new knowledge and the transmission of previously developed knowledge." The challenge for librarians is to rethink and recreate their place in this

process, and to move the focus away from the library as a physical space to a new reality of the library providing knowledgeable people who offer a variety of essential and timely services.

Librarians are challenged to explore new opportunities and implement changes in the following critical areas:

- Establish new roles and responsibilities for library professionals that result in quality services,

- Determine knowledge, skills and abilities required for all staff, create new partnerships,

- Redesign organization and realign the culture.

Implications for Change

The librarian's role should be characterized by visibility and vitality. Specifically, librarians should be highly visible and well integrated into the activities of their institution and the community they serve. This means that librarians should be valued as essential to the teaching, learning and research activities. Librarians, not solely the collections or the library building, should be valued and considered as an integral member parts of the teaching and research team.

Most important, librarians should be seen as part of the solution-contributing to quality education. Librarians need to be bold and imaginative in defining their role and decisive in acting upon it. They should be visionaries in conceiving the present and imagining the future and they should be willing to take the risks inherent in translating their vision into action.

What activities, services should librarians develop and strengthen in order to transform themselves into an integrated role within the academic enterprise at the beginning of the new century? Further descriptions of the following areas indicates that there is not only a need for reshaping of traditional services but also a requirement for the development of entirely new services in the emerging networked information environment.

- User Education

- Knowledge Management

- Organization of Networked Information Resources

- Information Policy Development

- Electronic Publishing and Curriculum Development

- Strategic and Operational Planning

Education of User Community: The central and essential role for librarians as teachers cannot be overemphasized. Librarians need to embrace a broad concept for user education, one in which they see themselves as actively contributing to the educational programs of the organization.

The concept of the teaching library and the librarian as a teacher will require a fundamental shift in the role of professionals. The historic role for the library and librarians has largely been collection and building centered with the individual (faculty or student) coming to the library to seek assistance or to locate material. The new paradigm of the teaching library, librarian as a teacher, is one in which librarians actively find users in a variety of settings to provide instruction about information resources and to assist them in acquiring skills in locating, evaluating and using a variety of methods of information, location and presentation such as interactive networks, multimedia, compiler instructed instructions and at different locations, such as labs, workrooms and classrooms librarians will create almost a 'library without walls'.

Instructional programs, designed to assist all members of the university, from the new student to the experienced faculty or researcher, in learning and remaining current with information resources (in all formats) will be a priority. Content for library instruction will range from general orientation on information resources to instruction in the complexities of using, and even developing sophisticated electronic databases to assisting faculty in incorporating multi-media resources into their courses. The objective within a very robust instructional program will be to integrate the basic concept of 'information literacy' with the more complex concept of 'informatics' relevant to a particular programme, researcher or student.

Additionally, librarians will need to give attention to the information needs of students taking courses away from the campus and the faculty who teach in this environment who need to access books, journals and other resources.

Students in a distance education setting will need to receive instruction on information retrieval and evaluation as well as obtain reasonable access to information related to their learning while faculty are likely to need all of the same resources and support of those on campus.

The teaching librarian suggests a broader and more integrated role than the passive nature of reference desk service in which professionals wait for the user to determine if he/she has a question and then to ask it. The teaching librarian goes beyond the idea of tours of the library or providing written handouts or even instruction on bibliographic sources. The teaching librarian embodies an outreach mindset, one in which librarians define a range of information needs of their varied user community (faculty, researchers, undergraduate and graduate students), and design and present instruction in a variety of formats (lecture, self-paced learning, group and individual learning) and at different venues (in a library, in a classroom, dormitory, over the Internet, computer assisted tutorial) to meet these needs.

Library personnel should also assist the faculty to search information relevant to their work using networked resources and through other latest methods of information with which the faculty members are yet not familiar.

Some faculty would want to design and develop their own multimedia products for teaching while others would want to identify and integrate electronic products (both multimedia and networked resources) into their courses. Whether an instructor is integrating existing resources into the curriculum or developing new ones, they must familiarise themselves with new technologies, software and hardware, and learn about new resources and how to use them in relation to the course objectives. In addition, of course, faculty would be exploring and testing approaches different from the lecture model. Librarians can have a central role in assisting faculty with developing skills and facility with the constantly changing technologies and information products.

In order to act on a new concept of user education that is innovative in nature, librarians will have to rethink the structure of traditional reference and bibliographic instruction services. Considerable staff resources would be required to implement such

a program and this means that it will not be possible to continue to provide all services that have been offered in the past. Some undesirable operations would have to be relinquished in order to move into these new endeavors.

Knowledge Management: Another direction for librarians to pursue in shaping their role and services for the future is knowledge management. Richard Lucier (1993, p 97) states that a knowledge management environment "embraces the entire information-transfer cycle, from the creation, structuring, and representation of information to its dissemination and use". This moves librarians beyond their present role of storage, bibliographic organization, and retrieval into the world of information transfer and creation. The changes occurring in the networked information environment increase the opportunities for librarians to shift and broaden their involvement in the information and scholarly process.

The concept of knowledge management embraces the need to organize large data files, and to link and integrate different but related files and databases to one another so that users can move between and among related resources efficiently. The knowledge management activity requires multidisciplinary teams consisting of faculty-researchers, librarians-information specialists, and technologists-software specialists in order to address the many complex content and technology issues.

As a new enterprise, librarians would have to acquire new skills and abilities and establish priorities in relation to other more traditional activities in order to have the time and energy to move into the knowledge management enterprise. The work is there, waiting to be addressed. Users, particularly researchers, are open to assistance from librarians as is evident from the experience of librarians within the medical community. Librarians, with their knowledge of information organization and access, existing electronic resources, and subject expertise are highly qualified to act as partners in creating new information products and new processes for the management of information databases.

Online Information Resources: Another activity for which librarians need to accept

responsibility and to exercise influence is in the organization of networked information resources. The Internet offers a powerful new way to communicate and gain access to information of all types. In describing the network and software products more generally, Ted Nelson (1983, p 2) says "what we are seeing out there is a tangled nightmare" and he characterizes the situation as one in which we are increasingly prisoners of clever technologists.

Librarians need to take initiatives for creating better organizations and access to what is available on the Internet. A virtual library is virtually useless if individuals have no structure from which to search and identify the materials they want or to establish the authenticity of materials which are found.

This requires that librarians broaden their view of cataloging to include electronic resources both those generated and stored on local networks along with sources on the Internet. Beyond, the traditional understanding of cataloging applied to electronic and networked resources, though librarians have a responsibility and a role to address the issue of authenticity of documents on the network. In the United States, Fred W Weingarten (1996, p 17), senior policy advisory at the American Library Association, says that "since electronic information is so easily reproduced and just as easily changed, we will also rediscover a problem from the pre-Gutenberg age of scribes: the search for the original source". So not only will librarians need to be able to provide intellectual and physical access to networked resources, but they would also need to contribute to the process of establishing the authenticity for these sources.

Information Policy Development: Another activity requiring continuing attention and leadership from librarians is the development of information policies. There is a range of information policy issues for which immediate and ongoing attention is needed. These issues should be addressed by librarians along with faculty, technologists, and university administrators. Certainly the issue around costs for access to electronic information and instructional software and hardware will need to be addressed. If end-users have to pay for all of these costs then there is a good

likelihood that information 'have' and 'have nots' will emerge. This would be a serious problem in higher education where information is central to the entire process of learning and research.

Beyond the individual institution, librarians have a responsibility on a national level to raise policy issues and to take a clear position on these issues. For example, librarians should be vocal on the issues of intellectual property rights and also access to information by citizens. Weingarten (1996, p 17), has described an activist role for librarians. He states that there are four currents of information commercial, private, public, and governmental - and that "librarians will have to be involved in managing the boundaries [within cyberspace] between the public space and the commercial and government environments". He goes on to say that "when the need for public information comes into conflict with the needs of commerce... librarians argue for a balance that takes into account the principles of public access to information and of free space... they must be strong voices... "

There are number of other policy issues that require open discussion and redefinition in the information technology environment including censorship and privacy. Librarians should assume a key leadership position in their institutions and communities, and on a national level, in identifying policy issues and contributing to the definition of coherent and fair policies in the networked information world.

Electronic Publishing: Electronic publishing will become commonplace at many places as faculty and researchers who serve on editorial boards seek ways to shift existing journals into this format while others seek to establish new and competitive electronic publications.

There is a definite role for librarians in this endeavour. Librarians can offer their resources technological and human—to provide a site for developing, testing and archiving electronic publications. This activity requires a collaborative effort among librarians, faculty as the subject specialists, and technologists. A range of materials already being published and/or issued in electronic format by universities includes the 'pre-print' distribution of papers by scholars, and the reissuing in electronic format of papers already published in

print when copyright clearance is received; papers from university symposia or conferences; referred journals; and multimedia products developed by university staff.

In all of these electronic publishing efforts whether working with faculty or focusing on the electronic distribution of specific library-held resources, librarians can contribute in a number of ways. Specifically, librarians can contribute to the organization of electronic information in order to ensure access, they can contribute to the testing of software applications for a specific project, and to addressing issues surrounding intellectual property. Finally, librarians, as they have in the past, have an important role in the archival function.

Strategic planning should be a fundamental concept that librarians incorporate into their daily activities. In the overall, they need to give greater attention to strategic planning at the organization and departmental level, and then integrate these strategic plans into the goals and activities of individual professionals.

For strategic planning to be worthwhile, the staff throughout the organization need to be involved in the planning process and need to understand the importance of this activity in relation to allocation of scarce resources - staff assignments as well as funds for equipment, space and collections. And there is a need to achieve consensus around the priorities and directions for the organization. Finally a strategic plan provides an important tool to establish accountability both within the library and to external constituencies.

Shaughnessy (1992, p 17) points out, "accountability extends beyond the domain of budgets, fund accounts, and expenditures. It includes all of an organization's assets ... [including] time on task". He concludes that librarians need to "focus on those activities and programs that are mission critical".

Strategic planning involves assessment and evaluation, cost-benefit analysis, both short- and long-term projection, and innovation. The strategic planning process should involve not only staff throughout the library but individuals from the user community as well as other individuals and groups

within the institution that will be instrumental in the success of the strategic plan.

In an environment of constant change, librarians will have to challenge traditions and assumptions regarding all aspects of library service. A self-critical and evaluative approach to all operations and functions will be essential along with a willingness to make decision based on facts and user needs instead of on personal feelings or "because we've always done it that way". A reliance on intuitive feelings or past experience is indefensible as a basis for allocating scarce resources, which is what decisions regarding operations and services represent. Equally important will be for library professionals to exercise a far greater degree of risk-taking, the willingness to take action when confronting an unfamiliar or unpredictable situation. In a time of rapid change, it will be necessary for decisions to be reached in a timely manner without the luxury of lengthy deliberations.

With the increasing costs to operate libraries, particularly the enormous investment for technology along with the expenditures for staff and collections in all formats, professionals should be able to think and act strategically and to articulate clearly the strategic directions and priorities to those outside of the library organization.

Acquiring New Knowledge, Skills and Abilities

If the scope and nature of librarians' role in the networked information environment are to be redefined and expanded, then much attention is needed in several aspects of personal and professional development.

It is essential that library professionals continuously acquire new knowledge and skills to ensure that they remain a vital part of information services of the future. Librarians are learning about a complex range of electronic resources and systems and are addressing complex issues involving information resource selection, cataloging, and copyright while also expanding user education to include new resources and systems. Librarians need to be able to design databases for their own use, assist faculty in such efforts, develop computer-assisted instructional programs for staff and 'user learning and integrate new technologies into service while

assisting users in learning how to apply the same for their work.

Beyond acquiring specific knowledge and skills, it is necessary for library staff to accept different expectations regarding their work, their working relationships and the environment in which they work. They need to develop strategies that allow them to work comfortably and effectively in the turmoil of the academic and information environments.

Partnerships and Collaboration

All organizations including universities are in a period of transformation and librarians should use this period of change to establish, refocus and strengthen partnerships with other professionals groups within their institutions. There are two significant groups with which library professionals should establish strong collaborative relationships: faculty and technologists.

Historically librarians have always had a strong link to the faculty as teachers and researchers but if professionals are to create a different and more dynamic role for themselves on campus, then the nature of this relationship may need to alter. In order for a real partnership to succeed, librarians need to see themselves as part of the teaching and research endeavour, and participate as an active and integral member of the education team. A fundamental tenet of a partnership or collaboration is one of peers working and communicating together. This requires that those involved - librarians and faculty - be equal within the activities and life of the partnership. And this occurs when there is mutual respect for what each person contributes to the relationship. Peter Drucker (1992, p 95), in his article The New Society of Organizations, states that the "modern organization ... has to be an organization of equals, of colleagues and associates. No knowledge ranks higher than another. Each is judged by its contribution to the common task rather than by an inherent superiority or inferiority".

Library professionals also need to reshape and strengthen their relationships with computer specialists and technologists in their institutions. Carol Barone (1993, p 73), Vice Chancellor Information Technology at UC-Davis, has described the fundamental need to establish robust partnerships. She states, we need each other! Complex tasks and rapid change require collaborative effort to succeed. Chaotic environments require mutual support. The best and most creative answers to problems are the result of synthesizing many ideas and viewpoints".

If librarians are prepared to absorb and even help shape the magnitude of predicted change into the next century then it will be important for them to realign their relationships within the institution so that strong partnerships exist to provide us with necessary support as well as knowledge for meeting the challenges ahead.

Reengineering the Organisation

All organizations are in a period of transformation including universities and their libraries with information technology acting as both a catalyst and an instrument of change. Billings (1996) views libraries as "organic, living, changing bodies of information, and they are becoming increasingly 'bionic' as their traditional, printed resources are being enhanced and extended through electronic technology".

There are many examples in libraries that reflect these principles for organizing work. Work is segmented into functional departments to simplify complex work for the staff, although not necessarily for the user. Libraries have multiple processing departments such as acquisitions, cataloging, binding, marking, and shelving. Direct user services require that the client (faculty, student, staff) come to the library and often to multiple service points to have questions answered, to search and borrow materials, and participate in instructional sessions.

Library professionals should be less concerned with an organization that reflects order and symmetry, comfort, and familiarity than with encouraging action and decision-making, risk, and innovation throughout the organization. Keen (1991, p 8) states that the mature organization, with its "long-established norms of stability and security must be replaced with new values such as speed, simplicity, and unparalleled customer service, and a self-confident, empowered work

force". While a change in library organization structure and culture is necessary, it is important to acknowledge that an organization is not an abstract concept or a piece of paper with boxes and lines but a living organism, a society comprised of people, feelings, attitudes, expectations, and needs. A significant change in the organizational structure may represent a very uncomfortable change for some individuals, particularly as lines blur and responsibilities and authority overlap.

It is essential to recognize that the strength of the library is the staff and that people can be fragile and, therefore, the organization will exhibit this same fragility. As change is undertaken, staff should be involved in some manner in the decisions that create major shifts so that they understand the reasons for changes. In this way, staff is more likely to develop a commitment to required changes in the organization and culture and, by extension, their own behavior.

The organization design for academic libraries in the future will not be built on a single model as has been largely true to date. While there will be great difference among libraries based on individual institutional needs and culture, teamwork should be central to the library organization of the future. Librarians should explore an organization design that relies on teams as the primary way that work is accomplished, decisions reached, and service delivered. Keen (1991, p.8) suggests that organizations in this intense information environment should shift from "organizing by division of labour to organizing by division of knowledge". The division of knowledge "captures an obvious reality of work in an era of rapid change and uncertainty", and is another way to conceive teamwork.

Library staff who are struggling to keep up with the demands in today's work environment require, indeed deserve, new ways for accomplishing their work. The redesign of the library organization is imperative if we are to move rapidly and with an entrepreneurial spirit in the delivery of services in the current interactive high-speed communication environment.

In order to make the transition from a structure that has been heavily hierarchical and segmented to one that is fluid and flexible, library professionals need to experiment and explore, remain open to considering new approaches, and keep the user as the central focus in any organizational design.

Conclusion

Although the new developments in information technology are challenging, even overwhelming, the real challenges that we face are not technical in nature. Instead it is the need to imagine and implement change that will translate traditional values into the networked and electronic information in future. In order for librarians to influence and shape the future of information services within the highly technological and global information environment, a change in vision is essential followed by a change in personal knowledge perspective and behavior. The change required by individuals is the greatest challenge we face in the new Century!

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Radhakrishnan's Reflections on Education

Renu Nanda

(Department of Education, University of Jammu, Jammu (Tawi)-180006)

To Sarvepalle Radhakrishnan the great educationist, philosopher and statesman, the objective of education was essentially to foster the quality of compassion in man. He emphasized that for a balanced growth man needed both knowledge and spiritual wisdom. He was firmly of the view that the moral qualities attained in the process of education were of greater value than mere intellectual accomplishments. The university, according to him, had a great responsibility—that of quickening a sense of moral values and faith in the human spirit—which would ultimately help usher in peace in the world. He declared that to conquer the forces of greed, arrogance and violence in the contemporary world, a refinement of the soul, *atma samskriti*, was needed. The university imparted not merely learning, but also culture. It should not be just a technical institute. It was essential for students to be civilized in their emotions and refined in their behaviour rather than be merely technically skilled or intellectually competent.

Although Radhakrishnan was fully aware of the values of India's rich tradition, he was careful to distinguish between outmoded and outdated values, and values that were relevant to the modern times. While calling himself a modernist, he defined modernism to mean the preservation of whatever was valuable in India's ancient heritage and the jettisoning of all that was irrelevant. He cautioned students to adopt a purpose of life which was not just time-honoured and traditional, but one that was geared to the relevant needs of the present times. He said that the ideal of the university was liberty of mind and freedom from conformity. A scientific spirit was something which enabled man to distinguish knowledge from opinion, fact from theory.

Value Education

The maxim 'character is destiny' held a singular attraction for Radhakrishnan. India's destiny as a nation depended on the value system that the youth imbibed. Radhakrishnan simply puts it that we cannot build rightly with the wrong materials. It was imperative, therefore, that young men and women should be trained in the right ideals and values. Through all the diversities of race, religion, language and geography, India's future as an entity lay in asserting these unifying ideas and values. The crisis of the present times was directly traceable to an imbalance caused by the disproportionate sense of triumph at the successes of science without an accompanying growth in moral character. Radhakrishnan pointed out, "We suffer today not so much from the split atom as from the split mind". Lack of humility, reverence for the ideals, grace of mind and charity of heart characterizing our troubled times could only be set right by a well-balanced education promoting cherished ideals and values. Radhakrishnan admitted, that if young people suffered from a lack of purpose, the fault lies with the system of education. Only by supplementing education with ethics and enlightenment could the sickness of society be cured.

Radhakrishnan recommended meditation as a mental discipline vital for realizing inward freedom. He considered knowledge of the self the greatest science. He felt that a man's culture was to be judged, not by the amount of tabulated information he had at his command, but by the quality of the mind by which he viewed life in general. Culture was not mere learning, but an understanding of life. He defined the qualities of a cultured mind as sweetness of temper, sanity of outlook and strength of spirit, patience, wisdom and courage. This culture could be attained only by meditating on the best that had been thought and said on the intimate problems of life. The university was the ideal retreat from the crowded world for solitude, study and reflection.

Content of Education

Radhakrishnan emphasized the need for universities to impart balanced education, avoiding the pitfalls of narrow specialization. In the programmes and curricula, whether in institutions of the liberal arts or the theoretical sciences, engineering and technology, there should be a proper balance between science and the humanities. Only then could education produce full human beings. However, Radhakrishnan repeatedly pointed out that the social sciences and the natural sciences were not by themselves adequate to equip man to face the challenges of our times though they doubtless gave

man knowledge and information. But to ensure that this knowledge was profitably used for the betterment of society, a study of aesthetics and ethics, philosophy and religion, was essential. These disciplines, though strictly not included in the social sciences, were nevertheless essential for guiding man in the right direction. As he put it, science, art, literature and religion, each portrayed facet with a colour of its own and yet all colours blended into a single whole. True education, he pointed out, gave a wholeness of view.

Education and Creativity

To Radhakrishnan there was a transcendence about man's creative expression. Whether its form was music or literature, dance or drama, sculpture or painting, he viewed the purpose of all art as sacramental. According to him, art led to refinement of soul and freed the human spirit momentarily from the inconsistencies and confusions of temporal life. It did not so much reproduce reality; it created aesthetic emotion. Radhakrishnan regarded the arts as a necessary discipline for realising creative imagination.

Radhakrishnan regarded literature too as a channel between man and spiritual vision. "The writer had a mission: he imparted a message. The shock and stimulation of a new thought or idea constituted *sahitya* or literature".

Pursuit of art, Radhakrishnan felt, made the process of education complete. Both the training of the intellect and the refinement of the heart disciplined the spirit and rendered the process of education humane.

Great art, Radhakrishnan felt, had necessarily to be universal in significance. Its message reached out to all men even across national boarders. Art was meant to stir the poetry arising in the hearts of men.

He believed that the artist should be given full freedom of expression. Though colleges had the responsibility of providing confidence and opportunity to the artist, good art had to be unregimented.

Artistic creation, Radhakrishnan felt, raised the quality of human life. Works of art had an enduring value which survived the violence and uncertainty of the times. Creative productions constituted the most effective means of achieving national integration and international solidarity.

Modalities of Education

As an educationist, Radhakrishnan was acutely aware of the need to gear the education pattern in India to the changed needs of the post independence era. He, therefore, urged a qualitative improvement in the education imparted, so that it might have a bearing on the quality of life in general. He was forthright in his critique of the education pattern, which obtained in his time.

Radhakrishnan was disappointed that the vitality and inspiration that animated the youth during the years of the freedom movement was sadly lost with the attainment of independence.

Another aspect, which caused concern to him was the disproportionate emphasis on science and technology. This was because he knew that, if misused, science and technology could threaten world peace. He emphasized that education should be well balanced. To that end he felt that a study of the humanities and a reliance on spiritual wisdom were imperative. At the same time he pointed out that any exclusive pursuit of literary studies, though inexpensive to arrange for, would make education lopsided. Science, engineering and technology were vital for developing the nation's resources and raising the standards of living of the common people.

Education and Development

Although, Radhakrishnan held that the worth of education depended on the overall impact it made on the quality of life, he was practical enough to look for the immediate impact of education in terms of development and progress.

He never failed to stress that education should be employment oriented. He felt that India's progress had so far been slow because it had concentrated on imparting education in the liberal arts, which was no doubt inexpensive, but not progressive. It had created wrong notions about the dignity of certain professions and bred indifference to others. As he put it indignantly, it was certainly not more dignified to hold a pen and keep accounts, than to work in a factory or a field.

Education and Freedom

Radhakrishnan was a firm believer in freedom of thought and expression. He believed that a student needed to develop the spirit of independent inquiry. In his total philosophy of life too, Radhakrishnan was

vehemently opposed to determinism: Man, he felt, should be able to take charge of events on a worldwide scale. He should cease to be a helpless, mechanical puppet and become a responsible creative being. As he put it, where freedom was absent, history was fate.

Radhakrishnan was a strong advocate of freedom from socioeconomic and racial inequalities underlying unrest in large parts of Asia and Africa. He wanted freedom not merely for India, but for all countries which suffered injustice.

Radhakrishnan repeatedly emphasized the oneness of India. He was concerned about the threats to India's unity held out by forces such as provincialism and communalism. A sense of unity could be cultivated by means of a well-conceived structure of national education.

The epics and the literary classics carried important lessons in national integration. Radhakrishnan, however, maintained that unity did not mean regimentation. Regional cultures and identities should be preserved within the one all-India fabric.

In the ultimate analysis Radhakrishnan conceived of freedom as a spiritual necessity for each individual. Moments of solitary reflection were necessary for individuals to express their thoughts freely and creatively. Criticizing the superficiality of modern life, he pointed out that men suffered from a fear of freedom, of loneliness, of responsibility, which is why they often sought the comfort of the crowd.

Women's Education

Radhakrishnan strongly felt that education of women should not mean just 'pretty accomplishments'. Women were fit to carry out the same academic work as men being equally competent. However, the universities had not paid enough importance to devising courses, specially suitable to women. Just because men and women had the same intelligence and competence, it did not follow that they should have identical academic courses. In their attempts to assert themselves vis-a-vis men, women insisted on the same courses as men. They held disciplines as home economics in contempt. Radhakrishnan sought to alter this perspective by pointing out that home economics was an attractive course, which would benefit women by equipping them to face the responsibilities of the home and the outside world. The vocational courses he recommended for women included home economics, nursing, fine arts and teaching. In the profession of teaching particularly he saw a great role for women; for they were natural teachers.

In the ultimate analysis, Radhakrishnan pointed out that women would be well advised not to imitate men, but to seek good education as women. There should be total parity between men and women so far as salaries were concerned, but the education pattern need not necessarily be identical. ❏

CALENDAR OF EVENTS

Proposed Date of the Event	Title	Objectives	Names of the Organising Department	Name of the Organising Secretary/ Officer to be contacted
June 10-30 2003	UGC Refresher Course in Pharmaceutical Sciences	To discuss various issues related to teaching of Pharmaceutical Sciences	Annamalai University Annamalainagar	Dr. R. Manavalan Refresher Course Director Professor and Head Annamalai University Annamalainagar-608002 (TN) Phone: 04144-239738 Fax: 04144-238080 Mobile: 9843048426, 09843048426
July 17-20 2003	National Conference on Physical Education and Sports Science	To discuss various issues related to Physical Education and Sports Sciences	Govind Ramnath Kare College of Law Margao-Goa	Shri Manoj V. Hede Sports Director, GR Kare College of Law, GR Kare Road, Tansor Comba, Margao-Goa Phone: 0832-2715510, 0832-2736791 Email: anchor_ads@rediffmail.com Kartik21@gaolelecom.com

Relevance of Medical Education for Overall Health Care

Pradeep Kumar Dave, Director, All India Institute of Medical Sciences, New Delhi delivered the seventh Convocation Address at the annual convocation of NTR University of Health Sciences, Vijayawada, on Thursday the 13th February, 2003. He said "The field of medical education has not remained untouched by *the climate of reforms. At least at the conceptual level there has been a major paradigm shift in the* emphasis from disease orientation to a community orientation; from disciplinary structures to integrated structures; from acquisition of information to the development of skills and problem based learning (PBL); from subjective assessment to objective modalities of assessment; and from individual efforts to institutional arrangements for ensuring quality assurance. The revolution in the information technology has resulted in dramatic changes in the delivery of teaching". Excerpts.

India is going through a major epidemiological and demographic transition—a process that has assumed greater significance in the wake of economic liberalization and the structural adjustment programme. This transition has major implications for medical education. At least at conceptual level, medical education is directly influenced by the health needs of a country and is expected to respond to its challenges.

The current state of the Indian health sector is a reflection of the nature of health investment, programmes and policy prescriptions adopted since independence. It was the Bhore Committee that laid the foundation and direction for development of public infrastructure in the health sector in 1946. From the inception of the first Five-year Plan emphasis was put on creating an enduring health infrastructure including a three-tier framework for health delivery—primary; secondary and tertiary—currently under operation to address the health needs of our population. From time to time several Expert Committees such as the Mudaliar Committed (1962), the Chadha Committee (1963), the Mukherjee Committee (1966), the Kartar Singh Committee (1973), the Bajaj Committee (1966) and several others were set up to review and suggest important strategies for improvement in the public health infrastructure and service delivery systems. However, the major shift in health development policies took place when India became the signatory of the Alma-Ata declaration of 1978. For achieving the goal of 'Health for all by 2000 AD' set by Alma-Ata, the National Health Policy was introduced in 1984. The National Health Policy, 2002 is another leap forward in the history of evolution of health care in India.

The field of medical education has not remained untouched by the climate of reforms. At least at the conceptual level there has been a major paradigm shift in the emphasis from disease orientation to a community orientation; from disciplinary structures to integrated structures; from acquisition of information to the development of skills and Problem Based Learning from subjective assessment to objective modalities of assessment; and from individual efforts to institutional arrangements for ensuring quality assurance. The revolution in the information technology has resulted in dramatic changes in the delivery of teaching.

The influence of information and communication technology, on medical education has been truly revolutionary! We have stepped into a new era in which students can access information and engage in self-directed learning. Beginning with the use of overhead projectors, slides and video, and going on to computers, multimedia and Internet, we have traveled a long way in harnessing the use of educational media. Due to the availability of high-speed computers, networking, satellite communication, CD-ROM technology and interactive CDs, instantaneous access to information from any part of the world has become a real possibility. Multimedia presentations and computer simulations are very effective for presenting bio-medical information in an illustrative manner. Computer simulations are particularly useful in teaching rare and complex operative procedures etc., which are not easily, accessible to students.

The field of tele-medicine too has opened up unlimited possibilities in terms of delivery of health care and exchange of health care information across distances using telecommunication technology. It is used for the transfer of basic patient information over computer networks, the transfer of images such as radiographs, CT scans, MRIs, Ultrasound studies,

pathology images, video images of endoscopic or other procedures, patient interviews and examinations, consultation with medical specialists and health care educational activities. Tele-medicine is of tremendous advantage in providing consultation facility from centers of expertise to remote areas in matters such as diagnosis, treatment and prognosis, besides providing health education to the rural community or, any other target audience in a phased manner.

When we are talking about the cutting edge of technology, we need to highlight the use of virtual reality and visualization. NASA has pioneered the use of 3D reconstruction and virtual environment technologies combined to train surgeons to plan and complex procedures in re-constructive and plastic surgery. A medical student would be able to dissect a human body, perform a surgical operation on a simulated patient, or give post operative advice to a patient living a long distance away through computer simulation - this is not a fantasy, or a science fiction story but shall be a reality in India sooner than you think!

I would like to share with you some of our own experiences in the field of medical education at the All India Institute of Medical Sciences. Some important gains made during the last few decades have been remodeling of the basic science curriculum, residential posting of interns to the rural community, integrated seminars across the MBBS Courses, objectivization of assessment procedure and introduction of super-specialty programs in several disciplines. The establishment of the KL Wig Centre for Medical Education has facilitated the organization education, to act as an, advanced center for designing formal instructional courses for certification, to develop database and information retrieval services on various aspects of medical education, and to undertake production of learning resource materials for the training of medical and other health care personnel.

The consortium of medical institutions for the reform of medical education is perhaps one of our more successful experiments in medical education. "Though originally started with just four medical colleges, viz., All India Institute of Medical Sciences, New Delhi; Institute of Medical Sciences, Varanasi; Christian Medical College, Vellore; and Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry; in collaboration with the Department of Medical Education, University of Illinois-Chicago, the project has been subsequently extended to cover sixteen medical colleges. The consortium institutions have adopted an 'Inquiry - Driven Strategy for Innovations in Medical Education', which consists of collecting a database from a variety of sources, identifying deficiencies and adopting appropriate curricular innovations.

The positive changes in the methodology of teaching have however, remained confined to a few elite centres of learning. A majority of the medical colleges suffer from a chronic shortage of resources, infrastructure, equipment and what is of critical importance—an adequately trained and qualified faculty support. Though the Medical Council of India has stressed upon the need for introducing both horizontal and vertical integration, attempts to introduce an integrated curriculum have not really succeeded. Instead of the encouragement of a participatory, interactive process, teaching remains didactic. Lectures still dominate instruction, hence curbing the initiative on the part of the students to pursue self-directed learning, critical analysis of facts, interpretation of data and problem solving. The three Cs which are of utmost importance the development of a humanistic approach to patient care—communication skills, compassion, and care—have unfortunately remained at the periphery of classroom learning. The public-private dichotomy and divide can be seen in the financial constraints being faced by the Public Sector Medical Colleges and the commercialization of private medical colleges.

Providing a high quality of medical education has been an important national agenda, but though India has over 170 medical colleges, there is a perceptive lack of well-defined standards, and absence of a strategy to link quality assurance with faculty development. Quality assurance is a holistic concept which includes accountability, development of standards providing facilities, institutional self evaluation and peer evaluation, besides faculty development as ongoing activities. One of the foremost requirement for quality assurance is the setting up of a National Quality Assurance Body which would primarily be responsible for providing quality assurance by commissioning visits by review teams and accreditation of programs / institutions for a specifically defined period, the new Health Policy, 2002 envisages the setting up of a Medical Grants Commission to reduce the problems on account of uneven standards and proliferation of medical and dental colleges in various parts of the country.

Radical changes in medical education are possible but only if there is a change in the role of various stakeholders, namely the central and state governments, private sector, non-governmental organizations and other institutions of civil society. The new National Health Policy, 2002 identifies the need to modify the medical curriculum to make it need-based and skill-oriented in order to enable fresh graduates to contribute to primary health services, the policy also talks about the need to introduce postgraduate courses in 'family medicine'. This indeed is a welcome change! Having more specialists, in public health and family medicine is a long forgotten agenda. Though over the past few decades public health has emerged a specialty in the developed world, it has remained neglected in India. At present, the study of public health is limited to the curriculum of community medicine. The scope needs to be broadened to incorporate areas of, current importance such as epidemiology, health policy analysis, gender studies and environmental sciences.

Now, I shall speak at some length about the epidemiological and demographic transition that the country is going through, which I briefly referred to in the beginning. While we are still far-from having wiped out the twin curse of infectious diseases and nutritional deficiencies, we are fast heading towards acquiring the dubious distinction of having also the largest number of patients having life style diseases such as diabetes and coronary heart disease. The epidemic of chronic degenerative diseases is only partly due to the increase in life expectancy; the other major contributors, the over-consumption of palatable and poor diets, excessive dependence on labour-saving gadgets, and mounting mental stress fuelled by the expanding availability of objects of desire. Thus it is no longer enough for our graduates to know the treatment of diarrhoea, even the general practitioner should be able to manage and prevent the complications of diabetes. The information that has become relevant to the medical graduate has expanded further due to a double revolution that medicine is going through, the impact of which is yet to be fully realized. One part of this revolution is the post-genomic stimulus to gene therapy and predictive medicine. With the fast pace of research generously funded by several major pharmaceutical companies, the day is not far when people will be asking doctors for a sort of medical horoscope. The other part of the revolution is at the holistic level Realizing the role of mental stress in disease, and that of mental peace in self-healing, and finding scientific support for mind-body relationship in psychoneuroimmunology, there has been a tendency to turn to ancient wisdom / ancient disciplines, such as yoga, combine superb lifestyles with potent prescriptions for mental peace. As a side effect, there has also been renewed interest in other systems of medicine, specially Ayurveda. With ancient disciplines on their way to becoming part of main stream scientific medicine, the range of subjects which a doctor will have to know is indeed mind-boggling while medical curricula are not likely to be affected by these futuristic trends. Very soon, a doctor graduating today may well be practising medicine 50 years from today. Therefore, it has become all the more important to remember that Sri Aurobindo called the first principle of teaching, that nothing can be taught! The student learns only what he wants to learn, not what the teacher teaches. So, just create in the student the desire to learn, the capacity to learn, and the ability to judge what area of medical knowledge he wishes to concentrate on. ❏

Interlinkages of Bribery Market

A National Seminar on 'Interlinkages of Bribery Market with Crime, Politics and Ecological Development' funded by ICSSR, CSIR and NCHR, New Delhi was organised, recently, by the Department of Economics, Sri Venkateswara University, Tirupati. Sri Naresh Gupta, I.A.S., Member Secretary, State Planning Commission, Government of Tamil Nadu in his keynote address stressed that corruption was defined as use of public power for private profit in a way that constitutes breach of law and as dishonesty and illegal behaviour in position of authority and power. The Santhanam Committee (1964) said that any action or failure to take action in the performance of duty by a government servant for some advantage was corruption. Corruption involves misuse of official position of authority, deviation from rules, laws and norms, non-action when action is required, personal gain for selfish motives, monetary or non-monetary forms, and harm to public good. Though corruption knows no boundaries, it appears that it is more 'responsive' to poverty stricken areas. Kautilya believed that just as it was impossible not to taste honey that finds itself at the tip of the tongue, so was it impossible for a government official not to eat up at least a bit of the kings revenue.

The Santhanam Committee's major recommendation was in regard to the appointment of *Lok Pal* and *Lok Ayuktas*. The Administrative Reforms Commission, in its first report presented on October 20, 1966 recommended the appointment of a Lok Pal and Lok Ayukta at the Centre and of a Lok Ayukta in every State for fulfilling the watch dog function. Even today *Lok Pal* with all amendments is distant to parliament.

The problem of corruption is of a complex nature which solves the needs of human beings but not greediness. India is an 'immoral' society, it has failed to discriminate between morality and immorality. Moral education must be imparted right from the start of life. The family and the school are the two important social institutions, which must be activated to articulate and reinforce moral values. The present-day mania to 'get rich quick' must be 'underplayed'.

Prof. R. Haridoss, School of Economics, Madurai Kamaraj University, Madurai analysed and found that crimes could be prevented if the people knew how to prevent them. Police officers should frequently address the people and explain them the need to prevent steps themselves. 'Today's pilferer is tomorrow's robber', says an adage. They also need counselling and patient handling, and efforts should be made to remedy the cause that made them commit the crime. NGOs can play an important role in eliminating human rights violations. "Men are not born bad, but they are made to become so".

Prof. A. Ranga Reddy, Department of Economics, Sri Venkateswara University, Tirupati emphasised that corruption was formulated as $C = M + D - A$. Corruption (C) equals monopoly (M) plus discretion (D) minus accountability (A). Corruption undermines democracy and destroys the credibility of government. Corruption is stealing from the poor men's pocket. Corruption is always antipoor, anti-development, anti-national. It undercuts the macro-economic efficiency, equity and institutional function of government. India has a dubious distinction of a high rate of corruption, high incidence of AIDS, widespread poverty, having a large number of disabled persons etc.

More than fifty papers covering areas of economic theory of bribery, corruption impact on development, socio-economic and political dimensions of corruption, zero-tolerance to corruption, corruption in Hindi satirical short stories, scams in India, costly courts and delayed judgements, crime and terror, sustainable forest development, public bandh, violation of human rights, global concerns towards corruption were presented. More than 40 outstation Resource Persons and scholars participated in the proceedings and passed resolutions. The Senior Faculty of the Universities of Madras and Pondicherry, Bangalore University, Osmania University, Centre for Economic and Social Studies, Hyderabad, Kerala University, Nagarjuna University, Manonmaniam Sundaranar University were associated. Around fifteen budding scholars of the above universities also presented papers and participated in the deliberations.

Sri K. Rami Reddy (Retd,) I.A.S served as president of the inaugural function. Prof. P. Murali, Vice Chancellor, Sri Venkateswara University, Tirupati in his inaugural address strongly supported the removal of corruption at every level of development.

In the valedictory function Prof. G. Raghava Reddy(Retd.), Department of Economics, Sri Venkateswara University Post Graduate Centre, Kavali stressed that every citizen should be trained as non-uniform policeman to make laws more effective and to bring down the social menaces and the inculcate ethics and morals at all levels. Prof. R. Haridoss, Head and Coordinator, School of Economics, Madurai Kamaraj University highlighted that corruption eroded the authority of the state, promoted crime and violence, undermined the rule of law and the very foundations of a democratic polity. He supported SMART (Simple, Moral, Accountable, Responsive and Transparent) governance in every nation and state so that the work of corruption would be put to a distance.

SIS Fellowship

Dr. R P Kumar, Chief Librarian, All India Institute of Medical Sciences, New Delhi has received SIS Fellowship for the year 2003 from Society for Information Science (SIS), New Delhi. The Fellowship was awarded to him during the inaugural function of the 21st Annual Convention and Conference of the Society held at the Indian Institute of Technology, Roorkee on the 9th April 2003. He is already the recipient of Ist ILA-Kaula Best Librarian award (1994), lst SALIS International achievement award (USA) - 1998 and MLAI - S J Kulkarni award for Best Medical Librarian (2001). He was awarded the rank of Honorary Librarian, Moody Medical Library, Galveston, USA in 2001.

Seminar on Reflective Practice in Teacher Education

A UGC sponsored State level Seminar on Reflective Practice in Teacher Education was held by G H Sanghavi Shikshan Mahavidyalaya, Bhavnagar, recently. The Seminar was organised by Dr. Ravindra Andharia, the Principal of the host college and guided by Dr. Chandrakant Bhogayata, Dean of Education Faculty and Head of Education Department, Bhavnagar University.

The Seminar that started with a prayer by Kajal Mule, was inaugurated by Dr. Naresh Ved, the Vice Chancellor of Bhavnagar University. In his keynote address he stated that that type of Seminar could be helpful in improving the present systems of Teacher Education. Shri Gulabrai Sanghavi, the President of Bhavnagar Kelavani Mandal, Dr. Mahesh Yagnik, the Pro Vice Chancellor of Saurashtra University, Shri Vinubhai Parikh, the Secretary of Bhavnagar Kelavani Mandal and Shri Ghanshyambhai Vora, the Assistant General Manager of SBS also inspired and wished success to the Seminar.

In the Seminar, 30 papers were presented in six sessions. They were on various aspects of reflective practice in Teacher Education particularly, reflective lesson planning, tools for practice etc. It is worth noting that professors, readers and lecturers as well as principals from colleges of education and departments all over Gujarat took active part in that Seminar.

USAB Short-term Courses

The University Students Advisory Bureau, University of Madras performs various services for the student community. It offers career guidance and counselling to students for their higher studies in India and abroad; self-employment training programmes; job oriented short-term courses; placing students in industries during the summer vacation for Internship training; exhibition on courses and careers; visits to schools and colleges to give career guidance; Foreign Students Admission etc. Regarding the short-term courses USAB UOM organised courses in Script Writing, Repair and Maintenance of Electrical Home Appliances, Computer Hardware Training, Air Ticketing and Travel Management and Executive Secretaryship etc. These short-term courses duration of which ranges from three to six months are more welcomed by the unemployed graduates.

The USAB collaborates with colleges affiliated to the University of Madras in organising the above the short-term courses. The University Students Advisory Bureau University of Madras gets good support from the Management in the execution of many useful programmes. Air-Ticketing Travel Management course was organized by USAB from November 2002 to January 2003. Ninety five students joined the course among whom about 50 secured jobs in various travel agencies including Jet - Airways and as trainees in Indian Airlines.

Education that prepares One for Life

Taking into consideration that around 60 % of nearly 13000 affiliated Arts, Science and Commerce

colleges in India do not function up to the mark, Dr. Xavier Alphonse, former Principal of Loyola College, Chennai advocated experimentation with new possibilities throughout India. He was the resource person for a three-day Conference on 'New Paths in Higher Education' organised by the Forum of Principals on April 25, 2003.

"You call the system anything - affiliating, autonomous, Deemed University, University, Degree-conferring College etc., but make me fit for life and fit for employment", he said quoting a student participant who pleaded at the 'Conference on the Challenges in Higher Education'.

He added that we were talking about the educated unemployed. But isn't it a contradiction? If he was educated, what type of education was it that did not come to his rescue? - he enquired. Should we continue with such a system or change it to respond to the needs of its customers?

Talking about the age-old affiliating system that was initiated by Britishers and discarded by them long ago, he said that the affiliating University was an examination conducting body which promotes uniform mediocrity. There was a lack of diversification of courses and absence of customisation of syllabus to meet the demands of the changing society. The entire teaching learning process is presently an examination preparation process based on memory work.

Dr. S Sathikh, former Vice Chancellor of the University of Madras encouraged people to work hard in order to meet the ills of the affiliating system. He said that at least some colleges should opt for autonomy which presently is related to academic autonomy. He emphasised that chances favour those who were prepared and supported the participants in their endeavours towards experimentation which, in his University, he had tried successfully 25 years ago.

"The success of autonomy lies on the teacher", said Dr. Alphonse. Can we, as teachers trust our own competence and be prepared to face challenges? He enquired, while adding that the same questions were asked 25 years ago when autonomy was conferred on Loyola College in Chennai and there was no turning back. "Autonomy is for experimentation, innovation and for the enhancement of quality", he commented.

The autonomy experiment has been a bold one and has had its struggles and agonies too - he said.

The merits of autonomous colleges are innovations in teaching and learning, customisation and restructuring of the course content and accountability in the delivery of higher education which is absent at present - he added.

Rehabilitation Centre at Jamia Hamdard

Padmashri, Prof P.K. Dave, Director AIIMS, inaugrated the Model Rehabilitation Centre at Majeedia Hospital, Jamia Hamdard recently. Prof. S. K. Kackar, former Director, AIIMS was the Guest of Honour. A reference was also made to the MoU signed earlier between JH and AIIMS in which the latter has promised full support to the centre. He also suggested that Jamia Hamdard consider Naturopathy among its other specialisations as it has a lot of potential.. With this center, they have realised the dreams of the founder of Jamia Hamdard, Hkm. Abdul Hameed Sahab Prof. Kakkar said organisation that can help the underprivileged of our society.

Majeedia Hospital is a registered 150-bed multi-disciplinary hospital providing treatment in Unani and modern systems of medicine with modern equipment, well-equipped ICU, four Operation Theatres, highly qualified and specialised Doctors and reputed consultants. It aims to provide quality healthcare to indoor and outdoor patients. The basement of Majeedia Hospital has been converted into an ideal Rehabilitation Centre, fully air-conditioned, with separate cubicles for different therapeutic modalities with the provision of piped music. The Centre is equipped with modern therapeutic equipment and postgraduate qualified therapists in the specialties of physiotherapy and occupational therapy. They provide a solution to orthopaedic problems, neurological problems, sports health, cardiopulmonary problems and psychiatric problems, neonatal problems by combination therapy, laser therapy, medium frequency therapy, therapeutic ultrasound, heat therapy, CPM upper extremity and lower extremity, electrical muscle stimulator, traction, hydrocholator pack, weight cuff, dumb-bells, stairs, ramp and multi exercise chair.

ISTD-IOC Book Award 2002-2003

The Indian Society for Training and Development (ISTD), a body of Training and HRD professionals with distinguished record of service spanning over three decades had instituted a Book Award for books on Management from the year

1997-98. The award for the year 2002-2003 has been sponsored by the Indian Oil Corporation Ltd., which had also sponsored the awards for 1999-2000, 2000-2001 and 2001-2002 to promote better and more effective utilisation of human resource through education.

The main objective of the award is to encourage Indian writers and to facilitate their making contribution in the understanding of management principles and practices including industry experiences, particularly in relation to HRD/Training and Development.

Seven prizes will be awarded. The first, second and third prizes will carry a cash award of Rs. 10,000/-, Rs. 7,500/- and Rs. 4,000/- respectively and the four consolidation prizes of Rs.1500/- each, besides a citation/certificate. There is no entrance fee for the award. A panel of judges, consisting of eminent trainers, academics, etc. will evaluate the books, which should have been published in English between April 1, 1998 to March 31, 2003. Further information may be obtained from the Executive Director, Indian Society for Training and Development, Training House, B-41, Institutional Area, New Mehrauli Road, New Delhi - 110 016, Phones: 26867710, 26867157. Fax: 011-26867607, E-mail: istd@ren02.nic.in. Website: www.istdhrd.org.

OUAT Celebrates Earth Day

The Earth Day was celebrated worldwide on 22nd April to promote water awareness. On this occasion Poster Competition among University and College students and exhibition on the theme 'Water for Life' was organised by the Department of Architecture, College of Engineering and Technology in collaboration with the voluntary organisation TREE (Trust for Regeneration of Environment and Economy) at the Orissa University of Agriculture and Technology (OUAT) campus. The Exhibition was inaugurated by Shri Sahadeva Sahu, Vice Chancellor of OUAT. Prof. B S Patro-Dean, Prof. S K Mishra and Co-ordinator Prof. H N Dash were amongst many present on the occasion. Students of Architecture actively participated in the events.

Seminar on Value Added Tax

The Departments of Commerce and Economics of the Government College of Arts, Science and Commerce, Sanquelim, Goa organised a State Level Seminar on 'Value Added Tax-its Implications' recently. Principal Dr. B A Gomes delivered the welcome address and set the ball rolling by highlighting some issues related to VAT. He brought the main justifications of the Government for introducing VAT and the opposing arguments of business, trade and commerce and their associations. Ms. Vanita Patil of Government College, Sanquelim, presented a paper on 'Draft of Goa's Value Added Tax - Some salient Features'. The session was chaired by M.S.H Kulkarni of D M's Bandekar College, Mapusa. A Panel Discussion on the topic was anchored by Mr. Vaman Naik, Reader in Economics of S S Dempo College of Commerce, Panaji. The participants in the Panel Discussion were Mr. Anand Sangoram, C.A., Mr. Shailesh Usgaonka, C.A. and Mr. Kamlesh Amlani, C.A. A paper on 'The Role of Value Added Tax in India's Tax Structure' was presented by Ms. Minaxi Bawa, M.E.S. College, Vasco.

Other papers presented during the Seminar were 'Implications of VAT on Goa' by Mr. Manoj S Kamat and Ms. Brenda Rodrigues of Damodar College, Margao, 'Value Added Tax - Dawn of a New Era' by Mr. Nilesh Borde and Ms. Fatima D'Souza, Government College, Khandola, 'Value Added Tax and its possible impact on State Revenue' by Ms. Shilpa Satoskar, Government College, Sanquelim.

The Rapporteurs, Dr. Gervasio Mendes and Mr. Chandrashekhar Rao, presented brief reports on the deliberations of the day. Ms. Agnela Dias proposed the a vote of thanks.

The Seminar was compered by Mr. S N Jamkhandi, Government College, Sanquelim.

Seminar on the Challenge of Unemployment

The Departments of Commerce and Economics of the Govt. College of Arts, Science and Commerce, Sanquelim - Goa organised a State Level Seminar recently on the topic of "Challenge of Goa's Unemployment - Need for Appropriate Policies and Strategies". Dr. B A Gomes, Principal welcomed the gathering and delivered the keynote address. He emphasised that the crux of employment generation-urban, rural or self - is investment, which should be encouraged by all means, by a suitable investment. Dr. Gomes also focused on the nexus between Employment Policy and few other Policies of the Govt., where synchronisation is needed. In particular, he pointed out to the Industrial Policy just

announced. Dr. Rekha Gaonkar, Reader in Economics from M E S College, Vasco, presented a paper on the topic 'Strategies for Generating Employment Opportunities'. This session was chaired by Principal, D M Deshpande of Saraswat College of Commerce & Management Studies, Mapusa. Thereafter, there was a lively Panel Discussion on the topic, anchored by Dr. Gervasio Mendes, Senior Lecturer in Economics, Govt. College, Sanquelim. The Panel for the discussion consisted of Mr. R S Mardholkar, Commissioner for Labour and Employment, Govt. of Goa, Mr. Narendra Padte, Labour Consultant, Mr. Christopher Fonseca, Trade Union Leader and Mr. Pritesh Desai, Students' Leader from Goa University. Other papers presented were 'Some light on the myths associated with Goa's Economy & Employment with special emphasis on primary sector' by Dr. Nandkumar Kamat, Scientist-Researcher at Goa University; 'Unemployment in Goa - Anatomy & Alternatives' by Mr. Manoj S. Kamat and Ms. Brenda Rodrigues, Lecturers in Commerce & Economics, respectively, from Damodar College, Margao; 'Unemployment in Goa - Causes, Policies & Strategies' by Ms. Agnela Dias, Lecturer in Economics, Govt. College, Sanquelim; and 'Anatomy of Goa's Unemployment' by Ms. Fatima D'Souza, Lecturer in Commerce, Govt. College, Khandola. All these papers were chaired and moderated by Principal L D Deshpande. Mr. Prashant Bhonsle, Lecturer in Commerce, Govt. College, Sanquelim proposed the vote of thanks.

Seventh Convocation of Assam University

The seventh Convocation of Assam University, Silchar was held recently. The Chancellor of the University, Dr R A Mashelkar, Director General, Council of Scientific and Industrial Research, Government of India presided over the function, and conferred degrees on the graduates. Prof. A Nigavekar, Chairman, University Grants Commission, was the Chief Guest who delivered the Convocation Address.

In this Convocation, degrees and diplomas were awarded to the candidates of the years 2000, 2001 and 2002. In all 8829 candidates were conferred degrees like PhD, MPhil, MD and MS besides postgraduate and undergraduate degrees in liberal arts and professional courses.

Delivering the Convocation Address, the Chief Guest emphasised the need to improve upon the quality and raise the 'standards' of higher education in India. He said that we were witnessing a revolution where knowledge had become the keyword and that the economy of nations was linked with 'knowledge readiness'.

Highlighting the role of higher education in this knowledge-based economy, Prof. Nigavekar said that universities would have to produce not only a good number of people with higher education, but they should also have to produce graduates of a 'particular quality who should be able to accept the new challenges to enable us to be globally competitive in various walks of life. These graduates should have the ability and skills to convert knowledge resources into assets. He called upon the teachers and students to be 'dreamers with a passion for hard work and quality'.

The Chancellor of the University, Dr R A Mashelkar in his Presidential Address congratulated the graduates, on whom he conferred the degree earlier, for their attainments, which included 18 PhDs, 90 MPhils, seven MSs and two MDs. He called upon the audience to break off from the convention, in giving a big hand to the candidates who were awarded Gold Medals and other prizes for their excellence.

Advising the students to 'dare to learn and learn to dare', Dr Mashelkar called upon them to break free from the conventional mindset and develop a positive attitude to face problems squarely. He was quite emphatic about the quality of Indian mind, but lamented about our failure to integrate ourselves and therefore, stressed the need for development of team spirit. He ended his address with the hope that in the 21st Century India, the land of ideas, should convert itself into the land of opportunities.

Earlier, welcoming the Chief Guest, the Chancellor, other guests and the candidates the Vice Chancellor, Prof S C Saha highlighted the achievements of the university during the last nine years.

He expressed the hope that UGC and other agencies of the Government of India would appreciate the unique needs of the university, because of its location in a region which has very poor communication channels with the mainland, and that they should be generous in providing funds and other resources for the university. ❏

Agricultural News

International Training on Molecular Biology

India occupies a prominent position amongst developing countries, especially in the Afro-Asian region for its traditional wisdom and powerful science and technology base, both symbiotically linked. With the opportunities and challenges the biotechnology and molecular biology techniques offer today, the Indian Veterinary Research Institute developed technologies for research and human resource development. Realising the need of many developing countries where these technologies are in early stage of development, the Institute has taken up a lead role in organising international training courses for the benefit of fellow research workers from other developing countries. As a part of this initiative of DARE, ICAR, New Delhi, the second International Training Course on Molecular Biology and Biotechnology Techniques in Animal Research (ICMBBTAR) - 2002 was organised at IVRI, Izatnagar recently.

The course was attended by six participants, three from Nigeria, one from Malaysia and two sponsored candidates from India from TANUVAS and NIAP (ICAR) Bangalore. The course provided hands-on practical training on selected molecular and biotechnology techniques used in the manipulation of DNA, RNA, proteins, cells, etc. Besides, expert lectures were delivered on theory and techniques for understanding, manipulating and synthesising biological molecules for specific uses in animal research. The course was inaugurated by Dr. S A H Abidi, Member, ASRB, New Delhi and Dr. S L Govindwar, Director, HRD, Deptt. of Biotechnology, Ministry of Science and Technology, Government of India was the Chief Guest for the valedictory function. Dr. A K Srivastava acted as the Course Director under the supervision of Dr. M P Yadav, Director, Indian Veterinary Research Institute, Izatnagar.

News from Abroad

Lewis Perinbam Honoured

Lewis Perinbam, O.C., a former Vice President of the Canadian International Development Agency (CIDA), who had represented the World Bank at the United Nations and was sometime Secretary General of the Canadian National Commission for UNESCO and the World University Service of Canada, has been named Chair of the Board of Governors of the Commonwealth of Learning (COL) for a three-year term.

The announcement was made recently by the Commonwealth Secretary-General, Donald McKinnon, on behalf of the organisation's Board of Governors.

Perinbam is a Vancouver resident who, until he assumed this position, was Senior Adviser (External Relations) at COL. He succeeds Dr. H. Ian Macdonald,

O.C., President Emeritus of York University, Toronto, and is the second Canadian to hold this post.

As reported Perinbam was the Chair of the 2000 Federal Government Task Force on the Participation of Visible Minorities in the Federal Public Service and Prime Minister Jean Chrétien recently appointed him a Governor of the Canadian Centre for Management Development.

COL was the first Commonwealth agency to be located outside Britain and is the only international inter-governmental organisation in Vancouver, Canada. It was created by Commonwealth Heads of Government to widen access to learning through the effective use of open and distance learning and new communications technologies. Malaysian Professor Gajaraj Dhanarajan is COL's President and Chief Executive Officer. ❏

BOOK REVIEW

Finance : The Backbone of Modern Age

P.K. Shukla

(Shri Shankaracharya Mahavidyalaya, Sector-VI, Bhilai Nagar (C G.)

In this era of globalization when the distances between various countries of the world, particularly in the business field, have almost disappeared, the importance of the role of money has increased tremendously. Under these circumstances when banking companies failed to provide adequate services to industry, trade and day to day life, there was a re-birth of Financial Companies, commonly known as NBFC. It is stated a re-birth because it is" only a changed and developed form of moneylenders of good old days. Those moneylenders used to lend money on small scale, but today they have transformed into large scale financial companies, the only difference being that the moneylenders had no organized manner of working nor had they any rules and regulations, whereas today's companies are well organized and properly run following rules and regulations. These companies are under RBI, Government and SEBI. All the rules and regulations related to the operation of NBFC have been shown by the author in his book-'Financial Services' in a well-organized manner.

The book is divided into three parts explaining Financial Services in a systematic way. The First Part is related to the introduction of NBFC and an in-depth study of the power of RBI over NBFC. In the same sequence the auditor report for NBFC, RBI Direction and cases of both holding public deposits and not accepting public deposits have been clearly presented by the author. The book not only deals with NBFC, MBFC and RNBC, but also explains the five categories of NBFC along with the restrictions of minimum credit rating. The book is no doubt an a mini encyclopedia in the subject of Financial Services.

Financial Services have been divided into two broad categories, Assets/Fund Based and Fee Based Advisory Services. The Part Two of the book deals with Assets/ Fund Based Financial Services, Leasing and its various categories have been defined along with the explanations of lease agreement, liability of lessees, liability of lessors, claims and insurance of leased assets, and rental structure with examples.

The topic Assets/Fund Based Financial Services has been divided into nine divisions and IAS-17 and AS-19 have been explained in the second division. This division also explains with examples the Accounting Methods in the books of lessee and lessor. Fifth division of the topic deals with Hire Purchase Finance whereas eighth and ninth divisions contain the study of Housing Finance and Insurance Services.

At this peak point of industrialization, the knowledge of working of Issue Management is very essential not only for people related to this field, but also for the common consumer and investor. Keeping this aspect in view the author had included in part-III of the book the activities and procedures of issue management under Merchant Banking and fee based advisory financial services. This part of the book has six divisions. In the first and the second divisions the author has explained the working system of Merchant Bankers, control of SEBI over them, under writers, and the role of bankers and brokers. The second division also includes the explanations of eligibility of capital issue, role of promoters, contents of advertisement. The fifth and sixth divisions deal with the activities of stock market, types, working and registration of stockbrokers and the agencies that certify the financial position of the company. These chapters contain detailed explanation of procedure of credit rating and related agencies.

The book under review is a valuable book for professional practitioners, although it has been designed primarily for teachers and advanced students of Finance. Management, Commerce, and Accounting. Since the book is on advanced study of financial services, it deals with the topics of Factoring related to international trade.

Due to a deep decline in the banking interest rates that has been witnessed in the past, the common investor is left with no other alternative except the stock market. Stock market is also not free from ups and downs; hence it is a must for the common investor to know about the stock market and credit rating system. Therefore this book is a highly useful and valuable one for those who are involved in this field, apart from the students and teachers. The references in the book are an added advantage. ❑

A list of doctoral theses accepted by Indian Universities
(Notifications received during January-February 2003)

AGRICULTURAL & VETERINARY SCIENCES

Agricultural Statistics

1. Azad, Mordia. **Application of regression models to assess the inter regional performance of agriculture in Rajasthan.** (Dr K A Varghese). Department of Agricultural Statistics, Maharana Pratap University of Agriculture and Technology, Udaipur.

2. Jain, Hemant Kumar. **Statistical analysis of agricultural time series data.** (Dr G S Gupta). Department of Agricultural Statistics, Maharana Pratap University of Agriculture and Technology, Udaipur.

Entomology

1. Mokbal, Abdullah Nasher Morshed. **Hormoligosis of insecticidal sprays in Bemisia tabaci (Genn.) on cotton.** Department of Entomology, Punjab Agricultural University, Ludhiana.

2. Pandar, Bal Kishan. **Studies on bio efficacy and residues of insecticides in on cabbage (Brassica oleracea var. Capitata Linn.).** (Dr L N Dadeech). Department of Entomology, Maharana Pratap University of Agriculture and Technology, Udaipur.

3. Shukla, Abhishek. **Bio-efficacy of some insecticides and development of ecosale management technology against Plutella xylostella Linn. along with its population dynamics in cabbage (Brassica oleracea var. Capitata).** (Dr Ashok Kumar). Department of Entomology, Maharana Pratap University of Agriculture and Technology, Udaipur.

4. Vyas, Anil Kumar. **Estimation of losses and evaluation of IPM modules against major insect pests of sorghum panicles.** (Dr O P Ameta). Department of Entomology, Maharana Pratap University of Agriculture and Technology, Udaipur.

5. Yadav, Surender Singh. **Investigations on host preference and evaluation of neem based biopesticides against heliothis armigera (Hubner).** (Dr Ashok Kumar). Department of Entomology, Maharana Pratap University of Agriculture and Technology, Udaipur.

Horticulture

1. Dubey, Shanta Kumar. **Studies on heterosis and combining ability in bottle gourd [Lagenaria siceraria (Molina) Standl.].** (Dr J B Maurya). Department of Horticulture, Maharana Pratap University of Agriculture and Technology, Udaipur.

2. Lakhawat, Shreedhar Singh. **Effect of pruning, gibberellic acid and nutrition on the growth and flower yield of Ganganagari red rose [(Rosa chinensis) Gruss an teplitz].** (Dr N J Sen). Department of Horticulture, Maharana Pratap University of Agriculture and Technology, Udaipur.

3. Rawat, Tapendra Singh. **Studies on heterosis and combining ability in cucumber (Cucumis sotivus L.).** (Dr R C Khandelwal). Department of Horticulture, Maharana Pratap University of Agriculture and Technology, Udaipur.

4. Sharma, Devendra Kumar. **Effect of foliar application of micronutrients and plant growth regulators on the growth, yield and quality of safed musli (Chlorophytum borrivilianum Santapau and Fernades).** (Dr Shaffat Mohammed), Department of Horticulture, Maharana Pratap University of Agriculture and Technology, Udaipur.

5. Sharma, Rajendra Kumar. **Effect of nitrogen, sulphur and time of planting on growth, flower yield and essential oil content of tuberose (Polianthes tuberosa L.).** (Dr Shaffat Mohammed), Department of Horticulture, Maharana Pratap University of Agriculture and Technology, Udaipur.

6. Verma, Piyush. **Studies on effect of different plant growth regulators and their modes of application on growth, yield and quality of coriander (Coriandrum sativum L.) cv. RCr-435.** (Dr N L Sen). Department of Horticulture, Maharana Pratap University of Agriculture and Technology, Udaipur.

Plant Breeding

1. Ameta, Vishnu Lal. **Genetical analysis of qualitative and quantitative traits in Linseed (Linum usitatissimum L.).** (Dr M A Shah). Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology, Udaipur.

2. Deora, Virendra Singh. **Heterosis and combining ability studies for various characters in sorghum [Sorghum bicolor (L.) Moench].** (Dr Vithal Sharma). Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology, Udaipur.

3. Jat, Vijay Singh. **Combining ability for yield and yield components in groundnut (Arachis hypogaea L.).** (Dr B R Ranwah). Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology, Udaipur.

4. Sharma, Hemlata. **Estimation of heterosis, combining ability and stability parameters in sorghum [Sorghum bicolor (L.) Moench].** (Dr G S Sharma), Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology, Udaipur.

5. Shekhawat, Kalyan Singh. **Inheritance of nitrogen fixation and seed yield in blackgram [Vigna mungo (L.) Hepper].** (Dr V L Mathur). Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology, Udaipur.

6. Tiwari, Santosh Kumar. **Genetic architecture of grain yield, seed protein and oil content in soybean [Glycine max (L.) Merrill].** (Prof S R Maloo). Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology, Udaipur.

Plant Pathology

1. Gurjar, Kanhaiya Lal. **Micro organisms associated with seeds of Okra [Abelmoschus esculentus (L.) Moench], their phytopathological effects and disease management.** (Dr S D Singh), Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur.

2. Khatik, Rajesh Kumar. **Management of chilli fruit rot pathogens by partially purified plant products preparation.** (Dr S L Choudhary). Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur.

3. Kumawat, Gopal Lal. **Epidemiology and management of downy mildew of isabgol (Plantago ovata Forsk).** (Dr M P Sharma). Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur.

4. Lal, Hem Chandra. **Prediction model for lentil rust and its integrated management.** Department of Plant Pathology, Rajendra Agricultural University, Pusa, Samastipur.

5. Mali, Bhagwati Lal. **Effect of mycorrhizal fungi on soybean [Glycine max (L.) Merrill] and their interaction with root pathogens, rhizobuia and pesticides.** (Dr M K Bhatnagar), Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur.

6. Meena, Ramji Lal. **Biology and management of banded leaf and sheath blight of maize caused by Rhizoctonia solanif. sp. sasakii (Kuhn) exner.** (Dr R S Rathore), Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur.

7. Ratnoo, Raghuvir Singh. **Investigations on white button**

mushroom, agaricus bisporus (Lange) SING in Rajasthan, India, (Dr Anila Doshi). Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur.

8. Saini, Satish Kumar. Pathological, physiological and biochemical characterisation of four different pathogenic strains of xanthomonas species. (Prof H N Gour). Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur

9. Shekhawat, Kayam Singh. Epidemiology and management of dry root rot of guar [Cyamposis tetragonoloba (L.) Taub] caused by macrophomina phaseolina (tassi) GOID. (Dr K L Jain), Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur.

10. Yadav, Rakesh Kumar. Studies on biology, ectomycorrhizal association and cultivation technology of Tricholoma crassa (Berk) Sacc. (Dr Anila Doshi). Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur

11. Zacharia, Sunil. Efficacy of partially purified plant product components in vitro and in vivo against plant pathogens. (Dr S L Choudhary), Department of Plant Pathology, Maharana Pratap University of Agriculture and Technology, Udaipur

Power Engineering

1. Halliker, Rudrappa Chanabassappa. Study on design and operational parameters of donkey operated power transmission unit. (Dr N S Rathore), Department of Energy Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur

2. Jain, Narendra Kumar. Thermal modelling and performance evaluation of a commercial solar dryer. (Dr A N Mathur), Department of Renewable Energy Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur

3. Jain, Sudhir. Development of insulation mill board from water hyacinth (Eichhornia crassipes). (Dr Ravi Mathur), Department of Farm Machinery and Power Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur

4. Mehta, Abhay Kumar. Machinery and power selection models for soybean wheat crop rotation. (Dr Pratap Singh), Department of Farm Machinery and Power Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur

Water Conservation Engineering

1. Jat, Mohan Lal. Prediction of drought under different agro climatic zones of Rajasthan. (Dr Rajvir Singh), Department of Soil and Water Conservation Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur

2. Kumkar, Jayshree Kashinath. Satellite remote sensing and geographic information system based decision support model for conjunctive utilisation of water resources in Chambal Commmand Area of Rajasthan. (Dr Virendra Kumar), Department of Irrigation Water Management, Maharana Pratap University of Agriculture and Technology, Udaipur

Soil Science

1. Goyal, Jagdish Prasad. Integrated nutrient management in maize-wheat cropping sequence. (Dr L L Somani), Department of Soil Science, Maharana Pratap University of Agriculture and Technology, Udaipur.

2. Saini, Vinod Kumar. Studies on microbial biomass and available nutrients under integrated nutrient management in Sorghum chickpea sequence. (Dr S C Bhandari), Department of Soil Science, Maharana Pratap University of Agriculture and Technology, Udaipur

3. Sharma, Manoj Kumar. Studies on transformation of micronutrients in dominant soil orders of Rajasthan. (Dr B L Baser), Department of Soil Science, Maharana Pratap University of Agriculture and Technology, Udaipur.

4. Sharma, Yogesh. Effect of municipal sewage water on the soil properties and chemical build up of vegetables grown on sandy soils of Bikaner, Rajasthan. (Dr K L Totawat), Department of Soil Science, Maharana Pratap University of Agriculture and Technology, Udaipur.

5. Shilpkar, Prateek. Vermicomposting of lignocellulolytic plant residue and its effect on growth and yield of wheat greengram. (Dr S C Bhandari), Department of Soil Science, Maharana Pratap University of Agriculture and Technology, Udaipur

6. Yadav, Shashi S. Evaluation of soil properties and crop performance relationship in major soil groups of Western Rajasthan. (Dr B N Swami), Department of Soil Science, Maharana Pratap University of Agriculture and Technology, Udaipur

BIOLOGICAL SCIENCES

Biotechnology

1. Mam, Sankar. Molecular studies in thermostable and alkalistable xylanase from Bacillus sp. NG 27 and its functional regulation. (Dr Amit Ghosh), Department of Biotechnology, Panjab University, Chandigarh

Botany

1. Jha, Charumati Vasudev. Pollination biology ultrastructure cytochemistry and bio-chemistry during polleonpistil interaction of some poaceous plants. (Dr B K Jain), Department of Botany, North Gujarat University, Patan

2. Rabeka Sultana. Optimisation of microtuber production potato (Solawaoerun tuberosuo L.). Department of Botany, Maharaja Sayajirao University of Baroda, Vadodara

Microbiology

3. Kaushal, Anju. Early induction, purification and characterisation of acetolactate synthase of enterobacter cloacae for the production of 2,3- butanediol. (Dr Prince Sharma and Prof K G Gupta), Department of Microbiology, Panjab University, Chandigarh

Zoology

1. Banyal, Harinder Singh. Ecology of fish communities of some selected streams of Western Himalayas in relation to stream morphology. (Dr M S Johal and Prof K K Tandora), Department of Chemistry, Panjab University, Chandigarh

2. Bhassat, Neelima G. Altered neonatal adrenocortical functional status with or without melatonin on postnatal growth of male reproductive system in rats exposed to short photoperiod. Department of Zoology, Maharaja Sayajirao University of Baroda, Vadodara

3. Borad, Chandulal Keshavbhai. Organochorine pesticide residues in the body of some birds inhabiting agricultural field and the impact on their reproductive success. Department of Zoology, Maharaja Sayajirao University of Baroda, Vadodara

4. Pandya, Anubha Premal. Toxicological evaluations of industrial effluent polluted water studies on reproductive and other systems of male rat. Department of Zoology, Maharaja Sayajirao University of Baroda, Vadodara

5. Sengupta, Upal. Studies of biochemical genetics of selected enzymes of the chocolate mahseer acrossocheilus hexagenolepsis. (Prof K Chatterjee), Department of Zoology, North Eastern Hill University, Shillong

6. Yadav, Seema. Studies on the community composition and population density of benthic invertebrates in different habitats at Bilaspur District. (Dr Usha Awasthi). Department of Zoology, Awadhesh Pratap Singh University, Rewa

ENGINEERING SCIENCES

Civil Engineering

1. Nagaraja, M. Pavement maintenance management strategies for rural highways. (Dr Krishnamurthy and Dr A Veeragavan), Department of Civil Engineering, Bangalore University, Bangalore

Metallurgical Engineering

1. Jayaprakash, Vandana. Characterisation and thermal behaviour of iron ore and studies on thermal conductivity/diffusivity of its pellets. Department of Metallurgical Engineering, Maharaja Sayajirao University of Baroda, Vadodara

MEDICAL SCIENCES

Anatomy

1. Andani, Rashida Habib. **Study of dermatoglyphics in patients of thalessamia.** Department of Anatomy, Maharaja Sayajirao University of Baroda, Vadodara.

Genetics

1. Saleha Banu, B. **Genotoxic and biochemical effects in occupationally exposed groups of arsenic and copper based industries and murine model.** (Prof Mohd Ishaq), Department of Genetics, Osmania University, Hyderabad.

Paediatrics

1. Yadav, Manisha. **Molecular characterisation of IgA proteasegene of haemophilus influenzae in children.** Department of Paediatrics, Postgraduate Institute of Medical Education and Research, Chandigarh.

Pharmaceutical Science

1. Coumars, Mohane. **Synthesis and biological investigations of a new series of B-adrenoceptor blocking agents.** (Prof D P Jindal), Department of Pharmaceutical Science, Panjab University, Chandigarh.

PHYSICAL SCIENCES

Chemistry

1. Chandra, Manish. **Synthetic, spectral and structural aspects of some hydrido carbonyl Ru (II) complexes.** (Dr D S Pandey), Department of Chemistry, Awadhesh Pratap Singh University, Rewa.

2. Chhibber, Manmohan. **Experiments towards the synthesis of natural products and related compounds.** (Dr I R Trehan), Department of Chemistry, Panjab University, Chandigarh.

3. Fudani, Dineshkumar Ratan Singh. **Coordination polymers based on novel bissalicyclic acid.** (Dr M V Hathi), Department of Chemistry, North Gujarat University, Patan.

4. Mishra, Bijay Kumar. **Organised assemblies of amphiphiles: Studies on structures, physico-chemical characteristics and catalytic behaviour.** (Prof G B Behera), Department of Chemistry, Sambalpur University, Jyoti Vihar, Burla.

5. Pal, Anil Kumar. **Synthesis characterisation and reactivity of xaryl and diary-fluoro acetophenones.** (Dr Tejvir Singh and Dr R D Anand), Department of Chemistry, Panjab University, Chandigarh.

6. Sharma, Ashwani K. **Thermodynamic and related studies of mixtures of solvents and surfactant in solvents.** (Dr S K Mehta), Department of Chemistry, Panjab University, Chandigarh.

7. Singh, Anupam. **Synthetic and structural aspects of some ruthenium arene complexes containing nover bridging ligands with multiple nitrogen donarsites.** (Dr D S Pandey), Department of Chemistry, Awadhesh Pratap Singh University, Rewa.

8. Subhash, P V. **Chemical transformations of naturally occuring lignans into possibly bioactive compounds biomimetic synthesis of GME Lanone and synthesis of 10-Amino deibnzocyclooctadiene and 3,4-Dihydro diphyllin.** (Prof R Venkateswarlu), Department of Chemistry, Andhra University, Waltair.

Physics

1. Ajay Kumar. **Study of photon-atom interaction processes and analytical applications using eoxrf technique.** (Prof Nirmal Singh and Dr M L Garg), Department of Physics, Panjab University, Chandigarh.

2. Ghosh, Nilanjan. **Structural and associational aspects of some dielectropolar liquid molecules in nonpolar solvents from relaxation phenomena.** (Dr S Acharya), Department of Physics, University of North Bengal, Raja Rammohunpur, Distt Darjeeling.

3. Shah, Kamal Ramanlal. **A study of In Bi1-XsbX and InBi1-X SCx imtermetalic compounds.** Department of Physics, Maharaja Sayajirao University of Baroda, Vadodara.

4. Suman Lata. **A study of inhibitors for controlling corrosion of steel in sodium chloride solution.** (Dr R S Chaudhary), Department of Physics, Maharshi Dayanand University, Rohtak. ⊐

GURU NANAK DEV UNIVERSITY, AMRITSAR
ADMISSION NOTICE (2003-2004)

Applications are invited for admission to the following courses being offered at the Guru Nanak Dev University for the academic session 2003-2004.

(A) Courses at GND University Campus, Amritsar

(i) **M.Phil:** Hindi, History, Music (Vocal & Inst.) Political Science, Psychology, Punjabi, Religious Studies & Sociology.

Masters in Sports Physiotherapy and Bachelor in Physiotherapy

M.Sc. (Hons. School): Botany, Chemistry, Economics, Human Genetics, Physics, Zoology & M.Sc.(Hons.) Environmental Sciences.

M.Sc. : Applied Chemistry(Pharmaceutical), Applied Physics, Botany, Chemistry (Instrumental Analysis), Fermentation & Microbial Technology, Food Technology, Human Genetics, Industrial Chemistry(OSD), Mathematics, Microbiology, Molecular Biology & Biochemistry, Physics, Statistics & Zoology.

M.Com., M.Lib. & Inf. Science, B.Lib. & Inf. Science, M.A. (Hons.) Punjabi

M.A.: English, Hindi, History, Music (Vocal & Inst.), Philosophy, Political Science, Psychology, Punjabi, Religious Studies, Sanskrit, Sociology, Urdu and M.A. in Translation (Hindi).

M.P. Ed., B.P. Ed.

P.G. Diploma in Translation (Punjabi), P.G. Diploma in Printing Technology & Management.

B.Sc. (Hons. School) in Economics

B.A. (Hons. School) in English, Punjabi and Social Sciences

Diploma/Certificate Courses: Advanced Diploma Courses (Part-time) in French and Russian; Diploma Courses (Full Time) in French, Russian and Sanskrit; Diploma Courses (Part-time) in French, Russian, German, Persian, Urdu; Certificate Courses (Part-time) in Arabic, French, Functional Hindi, German, Japanese, Persian, Russian, Urdu and Sanskrit (Full-time).

(ii) **MBA/MBA (HRM)** (Two Years), **MBA** (Five Years Integrated course), **MCA** (Three Years); MCA (Five Years Integrated course), M.Tech. I.T.; M.Tech. Urban Planning; MBE; LL.M. (Two Years), LL.M. (Three Years), M.Sc. Biotechnology, LL.B. (Three Years), **B.Pharmacy** and **B.Sc. (Hons. School)** in Botany, Chemistry, Physics, Human Genetics and B.Sc. in Industrial Microbiology.

(iii) **M. Tech.** (Computer Science and. Engineering) Five years integrated course.

B.Tech.- Electronics & Communication Engineering, Computer Science and Engineering, Urban and Regional Planning, Food Technology, Textile Chemistry, Sugar Technology and **B. Architecture.**

(B) Courses at Maharaja Ranjit Singh Regional Campus, Jalandhar

(i) M.Phil.-Punjabi, M.A.-Punjabi, English and Mass Communication,

(ii) LL.M. (Two years), LL.B. (Three years) LL.B. (Hons.) Five years,

(iii) B.Tech.- Electronics & Communication Engineering, Computer Science & Engineering

(C) Other Courses at Jalandhar

MBA (Two years) at DAV College; MCA (Three years) at Lyallpur Khalsa College and MCA (Five years integrated) at University College

(D) Courses at GND University Regional Campus, Gurdaspur

(i) MBA (Two years), MCA (Integrated) Five years, LL.B. (Five years)

(ii) B.Tech.- Electronics & Communication Engineering, Computer Science & Engineering

Prospectus containing complete information regarding admission to various courses shall be available w.e.f. May 1st (Thursday), 2003 from the Cashier, Guru Nanak Dev University, Amritsar, Maharaja Ranjit Singh Regional Campus, Laddewali Road, Jalandhar, University College, Basti Nau, Jalandhar and University Regional Campus, Gurdaspur on payment of Rs.350/- at the counter or by post from the Assistant Registrar (General), Guru Nanak Dev University, Amritsar by sending a Crossed Demand Draft of **Rs.400/- drawn in favour of Registrar, Guru Nanak Dev University payable at Amritsar.**

Last date for receipt of Application Forms:

(a) For courses under (A) (i) and (B) (ii) above   June 10, 2003

(b) M.A. English/Punjabi under (B) (i) above   June 27, 2003

Notes:

1. For courses under (A) (i) and (B) (i)-Admissions through Entrance Tests to be conducted by respective Heads of Departments.

2. For courses under (A) (ii), (B) (ii), C and (D) (i)- Admissions through Entrance Tests to be conducted by respective Co-ordinators. Consult separate admission notice and/or Prospectus.

3. For courses under (A) (iii), (B) (iii) and D (ii) consult Admission Notice and CET 2003 Prospectus issued by the Punjab Technical University (PTU), Jalandhar.

DEAN ACADEMIC AFFAIRS

Directorate of Self Supporting Programmes
Awadhesh Pratap Singh University, Rewa (MP)
CONTRACTUAL APPOINTMENTS

Applications are invited for appointments of purely temporary contractual teachers on tenure basis for the session 2003-2004 renewable for next sessions at the fixed honorarium of Rs. 6000/- per month in the following Self Supporting Programmes of the University from the candidates who have obtained the masters degree in the concerned/given subjects with atleast 55% marks. Preference may be given to those who have qualified NET or any other eligibility test equivalent to NET and/or have obtained Doctorate degree in the subject.

Name of the Self Supporting Programme	Total No. of position	Reservations as per M.P. Govt. rules	Academic/Essential Qualification with Minimum 55% Marks
MA (Tourism Administration)	03	1ST, 2UR	Master degree in Tourism or (Desirable with Hotel Mgt./Travel Agn. Mgt. having knowledge of French/Japanese.
MBA (Human Resource Dev.)	03	1ST. 2UR	PG Degree in MHRD MBA/Master of Mgt. Studies.
M.Sc. (Computer Science)	03	1ST, 2UR	PG Degree in Comp.Sc./ MCA/M.Tech./MIT/ M.Sc. (IT)
M.Sc. (Information Technology)	03	1ST. 2UR	PG Degree in Comp.Sc./ MCA/M.Tech./MIT/ M.Sc. (IT)
M.Sc. (Biotechnology)	03	1ST.2UR	PG Degree in Bio-Tec./ Micro-Bio./Bio-Chem. Qualification as per UGC.
Bachelor of Physical Education Master of Physical Education	04	1ST. 2UR. 1SC	As per UGC & NCTE guidelines.
M.B.A. (Industrial Relations)	03	1ST, 2UR	PG Degree in Ind. Relation and Personnel Mgt./M.B.A. (Personnel Mgt.) any other equivalent degree with 55% marks.
Master of Social Work (MSW)	03	1ST. 2UR	MSW (Desirable one in Child Welfare and other in Labour Welfare).
M.Sc. (Bio Chemistry)	03	1ST. 2UR	P.G. Degree in Bio-Chem./ Chemistry/Bio-Tech.
M.Sc. Environ. Chemistry	03	1ST. 2UR	P.G. Degree in Chemistry/ Env. Chemistry

Note:
1. Applications on plain paper with biodata and attested copies of Marksheets/certificates etc. alongwith DD of Rs. 200/- (for SC/ST Rs. 100/-) only in favour of Director, SSP payble at Rewa must reach the Directorate, Self Supporting Programmes, APS University, Rewa (MP) on or before **10th June, 2003.**
2. University reserves the right to fill or not to fill the posts.

Registrar

(Prof. S.K. Nigam)
Director

Awadesh Pratap Singh University, Rewa (MP)
Admission Notice for Session 2003-2004
Self Supporting Professional Courses

Applications are invited for the following Regular Professional Courses of the University. Application forms can be obtained from Prof-Incharge of the Courses concerned on the payment of **Rs. 200/-** **in cash** or by sending a **Demand Draft of Rs. 250/-** in favour of the Professor-Incharge of the concerned course

Course and Duration	No. of Seats G P S	Eligibility	Entrance Test 2003
M.A. (Tourism Admn.) (4 Sem.)	35 05 05	UG PG degree with 50 Marks	16th July
M.Sc. (Comp. Sc.) (4 Sem.)	20 05 05	Bachelor's degree in second division with combination of any two subjects (Comp. Sc., Comp. App., Comp. Engg., Electronics, Maths and Physics) and with 50% Marks in theory or B.E.	17th July
M.Sc. (IT) (4 Sem.)	20 05 05	B.Sc. with combination of any two subjects (Comp. Sc., Comp. App., Electronics, Maths and Physics) and with 55% Marks in aggregate or B.E., BCA, BIT	17th July
M.Sc. (Electronics) (4 Sem.)	20 05 05	B.Sc. with combination of any two of the subjects (Physics, Maths, Electronics) and 50% in aggregate	22nd July
M.B.A. (HRD) (4 Sem.)	35 05 05	Bachelor Degree with 50% Marks in Aggregate	27th July
Master of Social Work (4 Sem.)	35 05 05	UG PG degree with 50% Marks	28th July
PG Diploma in Forest Mgt. (2 Sem.)	40 05 05	50% Marks in B.Sc.	28th July
M.B.A. (Industrial Relation) (4 Sem.)	40 05 05	Graduation with 50% Marks	29th July
M.Sc. (Bio-Technology) (4 Sem.)	15 05 05	B.Sc. Bio. Ag. MBBS with 50% Marks in theory	17th July
M.Sc. (Bio Chemistry) (2 years)	20 05 05	B.Sc. Chem. Biochem with 50% Marks in theory agg.	15th July
Diploma in Fashion and Textile Designing (1 year)	40	10+2 pass 50% Marks in aggregate for girls and boys	24th July
B.P. Ed. (1 year)	50	Graduate 45% Marks	28th July
M.P. Ed. (2 years)	20	B.P. Ed. BPPE DP Ed. 45% Marks	30th July
M.Phil. Environ. Sci. (1 year)	25 05 05	PG in Sc. Life Sc. Medical Engg. Ag. with Second Division	22nd July
M.Sc. in Environmental Chemistry (2 years)	40 05 05	50% Marks in B.Sc. (theory)	22nd July
PGDHR (PG Diploma in Human Rights) (2 Sem.)	30 05 05	Graduation 50% Marks	28th July
PG Diploma in Translation (PGDT) (1 year)	40 05 05	Bachelor's Degree	31st July
M.A. (Pub. Admn.) 2 years	30	Graduation with 45% Marks	8th August

G=General   P=Payment   S=Sponsored

- Candidate appearing in the qualifying examination may also apply. Admission will be made on the basis of merit obtained in Entrance Test to be held at APS University, Rewa (Also see Admission Brochure Rules) No TA DA shall be paid for appearing in the test
- Admission in B.P. Ed. M.P. Ed. will be made on the basis of merit based on the % of marks at graduation level, entrance test and sports achievements
- Reservation as per M.P. Govt. rules. 5% Relaxation in qualifying marks to SC/ST students
- Last date for submission of application shall be one day before the date of entrance test
- All correspondence should be addressed to the Professor Incharge of the concerned Programme/Course
- All eligible candidates should reach the concerned department centre for entrance test on the said date even if they have not received the admission card

REGISTRAR

(Prof. S.K. Nigam)
DIRECTOR

BANARAS HINDU UNIVERSITY

Admission to Special Courses of Study 2003-2004

Applications are invited for admission to the following Special Courses of Study for the session 2003-2004. The minimum/maximum number of seats and annual fees are shown in parentheses for each course.

1. 2-Year M.A. in Tourism Management (10-30, Rs. 30,000/-)
2. 2-Year M.A. in Social Work (15-30, Rs. 20,000/-)
3. 2-Year M.A. in Public Administration (10-25, Rs. 15,000/-)
4. 2-Year M.Sc. in Environmental Science (10-15, Rs. 30,000/-)
5. 2-Year M.Sc. in Molecular and Human Genetics (5-10, Rs. 25,000/-)
6. 2-Year Master of Personal Management and Industrial Relations (15-30, Rs. 42,000/-)
7. 2-Year Master of Finance & control (15-30, Rs. 30,000/-)
8. 2-Year LL.M. Course in Human Rights & Duties Education (5-10, Rs. 30,000/-)
9. 2-Year P.G. Diploma in Medical Lab Technology (4-10, Rs. 12,000/-)
10. 2-Year P.G. Diploma in Ayurvedic Drug Standardization (5-5, Rs. 12,000/-)
11. 2-Year P.G. Diploma in Panchkarma Therapy (5-5, Rs. 12,000/-)
12. 2-Year Diploma in Dialysis Therapy (2-2, Rs. 15,000/-)
13. 1-Year Certificate Course in Intensive Care [Post M.D. Anaesthesia] (2-5, Rs. 10,000/-)
14. 1-Year Certificate Course in Pain & Palliative Care [Post M.D. Anaesthesia] (2-5, Rs. 10,000/-)
15. 1-Year P.G. Diploma in Japanese Studies (5-10, Rs. 10,000/-)
16. 1-Year Certificate Course in Painting (10-10, Rs. 5,000/-)
17. 1-Year Certificate Course in Advertising Design (10-10, Rs. 5,000/-)

Candidates appearing in the qualifying examination are also eligible to apply. If willing to apply for more than one course, fill separate application forms. If the number of candidates opting for a particular Course is less than the minimum number of seats, the admission to the Course shall not be done.

Important Dates:

Commencement of sale of application forms from the counter:	**12.05.2003**
Last date for receipt of requisition for sending the application forms by registered post:	**31.05.2003**
Last date for sale of application forms through counter:	**16.06.2003**
Last date for receipt of duly completed application forms both by hand and by post:	**18.06.2003**

Information Bulletin & Application Forms:

The application form along with Information Bulletin can be obtained against **Crossed Demand Draft of Rs. 600/- in favour of the Controller of Examinations, Banaras Hindu University payable at State Bank of India, BHU Branch (code 0211),** from the Office of the Controller of Examinations, Banaras Hindu University from 11.00 a.m. to 2.00 p.m. on all working days or through Registered Post from the Office of the Controller of Examinations, Banaras Hindu University, Varanasi - 221 005 by sending a written request letter in an envelope Superscribed "SPECIAL COURSES" along with the following:

(i) A crossed Demand Draft for Rs. 650/- (including charges for Registered Post) in favour of the Controller of Examinations, Banaras Hindu University payable at State Bank of India, B.H.U. Branch (code 0211).

(ii) A self-addressed envelope of the size 32 cm x 26 cm without affixing postal stamps.

Details on the website www.bhu.ac.in

REGISTRAR

SANJAY GANDHI POSTGRADUATE INSTITUTE OF MEDICAL SCIENCES

Lucknow-226014, India

Phone Nos.: 91-522-2668004-8, 2668700, 2668800, 2668900 Ext: 2469/2009
Fax Nos. 91-522-2668017, 2668098, and 2668129, E-Mail: dean@sgpgi.ac.in

Advertisement No. Acad. 20/2003

ADMISSIONS & APPOINTMENTS

Applications are invited from qualified Indian nationals for admission/appointment to **D.M/M. Ch/PDCC/PDF/Senior Resident (Hospital Services)** in the following specialities commencing from July 2003.

Department	PDF (One Year)	DM/M Ch (Three Years)	Senior Resident (HS)			
			UR	SC	ST	OBC
Cardiology	---	—	03	01	---	2
Immunology	---	---	02	01	--	1
CVTS	---	—	03	02	---	02
Critical Care Medicine	---	—	05	04	—	03
Endocrinology	---	---	—	---	---	01
Endocrine Surgery	---	—	—	01	---	01
BMT/Hematology#	—	—	03	—	---	01
Gastroenterology	---	02	01	01	--	...
Medical Genetics	—	—	01	01	---	01
Nephrology	01*	—	02	—	---	01
Neurology	---	—	03	01	- -	01
Neurosurgery	---	02	02@	---	---	01
Surgical Gastroenterology	01ψ	---	01	02	....	01
Urology	—	02	---	01	- -	..
Anaesthesiology	....	—	03	03	01	05
Microbiology	—	—	01	01	...	..
Nuclear Medicine	—	—	01	01	01	01
Pathology	—	—	02	—	—	01
Radiodiagnosis	—	—	01	—	--	01
Radiotherapy	—	—	02	01	....	01
Transfusion Medicine	—	—	01	01	---	...

PDCC (Duration One Year)	No. of Seats	Essential Qualification
Nuclear Nephro Urology	01	MD/DNB (Nuclear Medicine)
Paediatrics Endocrinology	01	MD/DNB (Paediatrics)
Paediatric Gastroenterology	01	MD/DNB (Paediatrics)
Renal Pathology	02	MD (Pathology)
Endocrine Surgery	02	MS (Surgery)

*Renal Transplantation Medicine, ψ Pancreatico-Biliary Surgery, # Currently part of immunology
@ 01 post is for Neuro-otology and 01 for Neuro-opthalmonogy
Essential Qualifications for DM/MCh Courses: MD (Medicine/Pediatrics) for DM courses and MS in Surgery for MCh courses respectively or an equivalent qualification recognized by MCI for this purpose.
Essential Qualifications for Senior Residents (Hospital Services): M.D./M.S. in respective speciality or equivalent qualification recognized by MCI. For Nuclear Medicine a candidate with M.D. (Nuclear Medicine) or MBBS with DRM and for Transfusion Medicine: M.D. (Transfusion Medicine/ Pathology) or MBBS with PhD. in Transfusion Medicine can also apply. A candidate with M.D. (Obst. & Gyne.) can also apply for Medical Genetics. For BMT/Hematology candidate with MD (Medicine/ MD (Pediatrics) can apply. For Critical Care Medicine candidate with MD in Anesthesiology, Pulmonary Medicine, Internal Medicine or Paediatric can apply

Essential Qualifications for PDF: DM (Nephrology) for Renal Transplantation Medicine and MCh. (Surgical Gastroenterology) for Pancreatico-Biliary Surgery.

Age: Upper age limit as on 01.07.2003 for DM/MCh./PDCC Senior Resident (HS) is 35 years. Widow or divorced or legally separated women and SC/ST/OBC candidates may be given age relaxation as per Government rules. **For PDF candidate there is no age limit.**

General instructions:

1. **Application forms for all programs shall be available from 5th May to 25th May-2003. LAST DATE FOR RECEIPT OF COMPLETED APPLICATIONS is 31/05/2003.**

2. Information brochure cum application forms can be obtained from the Office of the Executive Registrar, SGPGIMS, Lucknow by post on payment of **Rs. 1050/-**(inclusive of postage) by demand draft **(non-refundable) in favour of the Director, SGPGIMS, Lucknow Academic Account. SBI SGPGI Branch. (Code No. 7789) payable at Lucknow.** The Information brouchure can also be obtained (in person) from the State Bank of India. SGPGI Lucknow against cash payment of Rs. 1000/-

3. The Information brochure cum application form can also be downloaded from Institute's Web Site [http://www.sgpgi.ac.in] and sent alongwith Bank Draft of Rs.1000/- in favour of the Director, SGPGIMS, Lucknow Academic Account, SBI, SGPGI Branch, (Code No.7789) payable at Lucknow.

4. The Theory examination for selection of D.M./M.Ch/PDCC/Senior Residents (Hospital Services) will be held on **15th June 2003**, CANDIDATES APPLYING FOR PDF ARE EXEMPTED FROM THEORY EXAMINATION.

5. Venue of Theory Examination shall be notified on institutes web site and also through admit cards.

6. *The number of seats/posts advertised could vary without prior notice.*

7. Reservation will apply as per rules.

8. In case of any dispute the decision of the Director, SGPGIMS, Lucknow will be the final.

EXECUTIVE REGISTRAR

SREE SANKARA COLLEGE ASSOCIATION
Sankar Nagar, Kalady
REQUIRES - PRINCIPAL

Applications are invited from the eligible candidates for the post of **Principal** in Sree Sankara College. Kalady, Ernakulam Dist. The applications duly completed in all respects should reach the undersigned within **30 days** from the date of publication of this advertisement at the College Address. The cost of application form is **Rs. 150/- (Rs. 200/- by post).**

QUALIFICATION

1. A Master's Degree with at least 55% of the marks or its equivalent grade of B in the seven point scale with letter grades O, A, B, C, D, E & F
2. Ph.D. or equivalent qualification
3. Total experience of 10/15 years Teaching/Research in Universities/Colleges and other institutions of higher education.

PAY SCALES: As per the UGC, Govt. of Kerala and M G University rule.

NOTE: 1) Eligible candidates should submit their application through proper channel. 2) No TA/DA will be paid for attending the interview. 3) Attested xerox copies of Certificates, Marks Memos etc should be attached to the application

Send the application to. **The Managing Director, Sree Sankara College Association. Sankar Nagar, P.B. No.1, Mattoor P.O.,Kalady-683574.**

PS. Those candidates who are eligible and presently working in this college can also apply.

Sd/-
Managing Director

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE (BITS)

PILANI, (RAJASTHAN) 333 031   http://www.bits-pilani.ac.in

ADMISSIONS FOR I SEMESTER 2003-2004
Off-Campus Distance Learning and Collaborative Programmes

The Birla Institute of Technology and Science (BITS) Pilani, which is deemed to be a university, is an all-India Institute for higher education for men and women and awards its own degrees. The Institute offers the following off-campus distance learning and collaborative programmes:

INTEGRATED FIRST DEGREE PROGRAMMES - BS (Code BZ)

Normal Duration 6 Semesters

1. **BS Engineering Technology (ET) 2. BS Information Systems (IS)** : *Input requirements :* Employed persons with minimum two years relevant experience and a technical diploma or an undergraduate degree like B.Sc. etc. involved in engineering professions for ET or computer software/hardware for IS.

HIGHER DEGREE PROGRAMMES - MS (Code MZ)

Normal Duration 4 Semesters

3. **MS Software Systems (SS)** : Input requirements : Employed persons with minimum one year relevant experience in software development or allied areas with integrated First Degree of BITS like B.E. (Hons.), M.Sc. (Hons.), B.S. Information Systems or equivalent.

4. **MS Manufacturing Management (MM)** : *Input requirements* : Employed persons with minimum one year relevant experience in engineering industries with Integrated First Degree of BITS like B.E.(Hons.), B.S. Engineering Technology or equivalent.

COLLABORATIVE PROGRAMMES WITH INSTITUTE OF CARDIO-VASCULAR DISEASES, (ICVD) CHENNAI

5. **BS Physician Assistant (Code BZB)** : 4-year Integrated First Degree programme with classes, laboratory work, and in-service training at ICVD Chennai. *Input requirement :* Pass in 10+2 from Central/State Board or its equivalent with Physics, Chemistry and Mathematics/Biology. *Some Financial Assistance may be provided for selected needy and deserving candidates. After completion of the programme candidates may be absorbed/allowed to work for M.Phil./Ph.D. at ICVD while on the job.*

COLLABORATIVE PROGRAMMES WITH SANKARA NETHRALAYA, CHENNAI

6. **BS Optometry (Code BZA) and 7. BS Ophthalmic Assistant (Code BZA)** : 4-year Integrated First Degree programme with classes and laboratory work at the Elite School of Optometry, Chennai. *Input requirement :* Pass in 10+2 from Central/State Board or its equivalent with Physics, Chemistry and Mathematics/Biology. **8. MS Medical Laboratory Technology (Code MZZ)** : 3-year Higher Degree programme with classes and laboratory work at the Medical Research Foundation, Chennai. *Input requirement :* B.Sc. in experimental sciences with exposure to Biology and Chemistry or equivalent. **9. M.Phil. Optometry (Code MZZ)** : 2-year Higher Degree programme with classes and laboratory work at Medical Research Foundation, Chennai. *Input requirement:* B.S. Optometry of BITS or equivalent.

COLLABORATIVE PROGRAMMES WITH L.V. PRASAD EYE INSTITUTE (LVPEI), HYDERABAD

10. **BS Optometry (Code BZC)** : 4-year Integrated First Degree programme with classes and laboratory work at the Bausch & Lomb School of Optometry, Hyderabad. *Input requirement :* Pass in 10+2 from Central/State Board or its equivalent with Physics, Chemistry and Mathematics/Biology.

The short-listed candidates will be required to take an Entrance Examination and Interview at Chennai on 16th July 2003 for programme 5; 19th July 2003 for programmes 6,7,8 & 9 and at Hyderabad on 24th July 2003 for programme 10.

BITS also operates several other collaborative programmes with many industries across the country in functional areas directed towards their HRD needs. Any organization interested in such collaborative programme may write to the Institute for details.

APPLICATION PROCEDURE :

Application form and Bulletin can be obtained from the undersigned against a request on plain paper giving name and code of the programme for which application is requested, candidate's name, e-mail address, complete postal address with pin code, the required dispatch mode and demand draft details accompanied by requisite fee in the form of a crossed demand draft drawn in favour of **Birla Institute of Technology & Science (BITS), Pilani** payable at State Bank of Bikaner & Jeipur, Pilani (Code : 1398) or UCO Bank, Vidya Vihar, Pilani (Code : 0150) for Rs. 500/- (Registered Parcel Post) or Rs. 600/- (Registered Letter/Speed Post wherever Speed Post is available) or US $25 or its equivalent (for sending to foreign countries by Airmail).

Deadline for submission of the duly completed application forms is 5.00 P.M. on 30th June 2003.

May, 2003   **DEAN, DLPD, BITS, PILANI - 333031 (RAJ.)**

ANNAMALAI UNIVERSITY

DIRECTORATE OF DISTANCE EDUCATION

Admission to M.B.A. Degree Programme - 2003 - 2004

Applications are invited for admission to **M.B.A. Degree Programme** through Distance Education mode.

Duration: **Three Years.**   Eligibility: **Any Degree.**

Admission procedure as per AICTE Norms. Preference will be given to the candidates with work experience.

Cost of Application Form: Rs. 250/- in person, by Post Rs. 280/-.

Application form and prospectus can be had from the Director, Directorate of Distance Education, Annamalai University, Annamalainagar - 608 002 by post on requisition along with a Demand Draft drawn in favour of the Director, D.D.E. for Rs. 280/- on any bank payable at Annamalainagar/Chidambaram/Chennai.

Application can also be had in person on cash payment of Rs. 250/- from the Directorate of Distance Education and the following Study Centres of the Directorate.

Spot Selection for Entrance Test is made at the following Study Centres and Directorate of Distance Education from **23.04.2003.**

Date of issue of application form	**23.04.2003**
Last date for issue of application form	**21.07.2003**
Last date for receipt of filled in applications	**21.07.2003**
M.B.A. ENTRANCE TEST	**27.09.2003**

> *The National Assessment and Accreditation Council has accredited Annamalai University at the FOUR STAR LEVEL among the universities.*

PLACE : Annamalainagar   **Dr. M. ARUMUGAM**   **Dr. M. RATHINASABAPATHI**
DATE : 20.04.2003   DIRECTOR   REGISTRAR

STUDY CENTRES IN TAMIL NADU: (1) CHENNAI – EGMORE: 1 ✆ 044-28555010, 28554003; Fax No.: 044-28514823; (2) CHENNAI – CHROMEPET: ✆: 044-22388035; (3) CHENNAI – AMBATTUR: ✆ 044-26572169; (4) COIMBATORE: ✆: 0422-2234406; (5) DHARMAPURI: ✆ 04342-270234; (6) DINDIGUL: ✆ 0451-2424211;(7) ERODE: ✆: 0424-2214787; (8) HOSUR: ✆ 04344-241254; (9) KANCHEEPURAM: ✆ 04112-235950; (10) KARAIKAL: ✆ 04368-221233; (11) KARAIKUDI: ✆ 04585-226417;(12) KRISHNAGIRI: ✆ 04343-238373; (13) MADURAI: ✆ 0452-2628327; (14) NAGERCOIL: ✆ 04652-230561; (15) NAMAKKAL: ✆ 04286-233677; (16) OOTY: ✆ 0423-2444414; (17) PONDICHERRY: ✆ 0413-2202000; (18) PUDUKOTTAI: ✆ 04322-224824; (19) SALEM: ✆ 0427-2451666; (20) TANJORE: ✆ 04362-278986; (21) THENI: ✆ 04546-265420; (22) THIRUVANNAMALAI: ✆ 04175-222687; (23) THIRUVARUR: ✆ 04366-244221; (24) TIRUNELVELI: ✆ 0462-2500913; (25) TRICHY: ✆ 0431-2741950; (26) TUTICORIN: ✆ 0461-2326668; (27) VELLORE: ✆ 0416-2227647; (28) VILLUPURAM: ✆ 04146-226550.

STUDY CENTRES OTHER THAN TAMIL NADU: (29) BANGALORE: ✆ 080-6564926; (30) CALICUT: (31) CHANDIGARH: ✆ 0172-612822; (32) ERNAKULAM: ✆ 0484-2376103; (33) HYDERABAD: ✆ 040-27661186; (34) VISAKHAPATTINAM: ✆ 0891-2540166;(35) KOLKATA: ✆ 033-24667215; (36) LUCKNOW: ✆ 0522-2343230; (37) MUMBAI: ✆ 022-25653349; (38) NEW DELHI: ✆ 011-26087838, 26089082; (39) THIRUVANANTHAPURAM: ✆ 0471-2325141; (40) TIRUPATHI: ✆ 0877-2220374; (41) VIJAYAWADA: ✆ 0866-2555755; (42) ANANTHAPUR; (43) BHUVANESHWAR; (44) JAIPUR; (45) NAGPUR; (46) PUNE.

MARATHA SAMAJ SEVA MANDAL'S

CHHATRAPATI SHIVAJI NIGHT COLLEGE OF ARTS & COMMERCE, SOLAPUR.
101 – B, MURARJI PETH.
SOLAPUR – 413 001.

(Affiliated to Shivaji University, Kolhapur)

WANTED

Application are invited from eligible candidates for the following post.

Designation	Total posts	Reserved posts
Lecturer English	1 FT	@ 1 SC (II)

Note: @ indicates that the posts are advertised under Special Recruitment Drive

1. Roman figures in the bracket show the number of times the post have been advertised

2. If SC candidates is not available then other candidate will be temporarily appointed for one academic year only Such appointed candidate will have no claim or legal rights on the said post, if particular reserved candidate becomes available during the next years.

3. SC candidates who are domiciled out side of Maharashtra State will be treated as Open Category candidates

4. SC candidates are advised to send a copy of their application to the Deputy Registrar, Special Cell Shivaji University, Kolhapur - 416 004

5. For the posts advertised for 11 or more times, a relaxation of 5% will be provided from 55% to 50% of the marks at the Master's level for SC, ST category, if candidates with 55% of the marks are not available.

6. Educational Qualifications, pay Scales and Service Conditions will be as per rules of Shivaji University, Kolhapur. The details regarding educational qualifications will be supplied to the candidates on request.

7. Those who are already in service should apply through proper channel

8. Incomplete application will not be entertained.

9. Apply in a prescribed application forms giving full particulars **within a month** from the date of publication of this advertisement to the undersigned Prescribed application forms can be had from college on payment of Rs. 15/- by M O

Place: Solapur
Date: 2 5 2003

Principal   **President**

ATPADI EDUCATION SOCIETY'S
ATPADI COLLEGE, ATPADI
DIST. SANGLI-415301

(Affiliated to Shivaji University, Kolhapur)

WANTED

Application are invited from eligible candidates for the following post

S. No.	Designation	Total Post	Open Post
1	Principal	1	1

Note:

1. Ph.D. or equivalent published work and a minimum experience of 10 years (for principal or Reader's grade) or 15 years (for principal of professor's grade) of Teaching-Research in Universities and College and other Institutions is Essential

2. Educational qualifications, pay scales and service conditions will be as per rules of Shivaji University, Kolhapur

3. Those who are already in service should apply through proper channel

4. Incomplete application will not be entertained

5. Apply in a prescribed form giving full particulars **within a month** from the date of publication of this advertisement to the undersigned.

6. Prescribed application form can be had from college office on payment of Rs. 50/- in cash or by sending a D.D of Rs. 50/- and self addressed stamped Rs. 10/- envelope

Place: Atpadi

Date: 24.02.2003

Secretary
Atpadi Education Society,
Atpadi, Dist. Sangli

Shikshan Prasarak Sanstha's

PADMABHUSHAN VASANTRAODADA PATIL MAHAVIDYALAYA
Kavathe Mahankal.
Distt. Sangli - 416 405

(Affiliated to Shivaji University, Kolhapur)

WANTED

Applications are invited from eligible candidates for the following post

Designation	Total Post	Open Post
Principal	1	1

Note :

1. Ph.D. or equivalent published work and a minimum experience of 10 years (for Principal or Reader's grade) or 15 years (for Principal or Professor's grade) of teaching Research in Universities Colleges and other Institutions of Higher Education is Essential

2. Pay Scales and Service Conditions will be as per rules of Shivaji University, Kolhapur

3. Those who are already in service should apply through proper channel

4. Incomplete application will not be entertained

5. Apply giving full particulars within a month from the date of publication of this advertisement to the undersigned

Place: Kavathe Mahankal
Date : 28/4/2003

SECRETARY   **CHAIRMAN**

Indira Gandhi National Open University
Maidan Garhi : New Delhi-110 068

Invites Applications for Admission to the
BACHELOR OF EDUCATION
(B.Ed.) PROGRAMME
For January, 2004 Session

The B.Ed. Programme offered by IGNOU is an innovative programme utilizing self instructional materials and information technology along with interactive personal contact programmes. The programme is essentially a judicious mix of theoretical and practical courses to develop in practicing teachers appropriate knowledge, skills, understanding and attitudes.

The B.Ed. Programme of IGNOU is recognized by the NCTE vide their Letter No. F3/DL-83/99/7807-7812 dated 31.05.99.

ELIGIBILITY FOR ADMISSION :

i   A Bachelor's Degree or a higher degree from a recognized University.

ii In-service teachers with two years (2 years) full time teaching experience in a primary/ secondary/higher/senior secondary school recognized by the Central or State Government or a Union Territory.

The admission to this programme is on the basis of an Entrance Test to be conducted on Sunday the August 3, 2003.

DURATION	:	2 YEARS
MEDIUM OF INSTRUCTION	:	ENGLISH AND HINDI

The Student Handbook and Prospectus can be obtained from all Regional Centres of IGNOU or from Director SR&E, IGNOU, Maidan Garhi, New Delhi-110 068 in person on payment of Rs. 500/- in cash or through post by sending an IPO or Demand Draft of Rs. 550/- drawn in favour of IGNOU payable at the city of RC or Head Quarter as the case may be. Please write your name, address and programme on the back of the demand draft.

The Student Handbook and Prospectus is also available on website at *http://www.ignou.ac.in*. The application form can also be downloaded from there and submitted with a demand draft of Rs. 500/-.

LAST DATES :

Requisition for supply of Prospectus by post   **16.06.03**

Submission of forms at the Regional Centre   **30.06.03**

Late and incomplete application forms shall be summarily rejected. No correspondence in this regard will be entertained.

Addresses of Regional Centres of IGNOU are available on internet at : http://www.ignou.ac.in

Director (SR&E)

Posted at NDPSO on Tuesday/Wednesday every week

UNIVERSITY NEWS 41 (19)   May 12-18, 2003   Regd. No. R.N. 7180/63   Postal Regd. No. DL-11106/2003-05

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE (BITS)

PILANI, (RAJASTHAN) 333 031   *http://www.bits-pilani.ac.in*

ADMISSIONS FOR I SEMESTER 2003-2004

The Birla Institute of Technology and Science (BITS) Pilani, which is deemed to be a university, is an all-India Institute for higher education for men and women, fully residential, and awards its own degrees.

I. PROGRAMMES

Admissions will be made on all-India basis strictly according to merit and suitability of the candidate to pursue the following programmes of studies.

1. Integrated First Degree Programmes (Code : FD)

Group A : B.E. (Hons.) : Chemical; Civil; Computer Science; Electrical and Electronics; Electronics & Instrumentation; Mechanical, B.Pharm. (Hons.), M.M.S. (Master of Management Studies).

Group B : M.Sc. (Hons.): Biological Sciences; Chemistry; Economics; Mathematics; Physics.

Group C : M.Sc. (Tech.) : General Studies; Engineering Technology; Finance; Information Systems

Normal Input : Pass in 10+2 from Central/State Board or its equivalent, with Physics, Chemistry, Mathematics and adequate proficiency in English.

Duration : Normally four years.

Note : Admissions are based on the normalized aggregate percentage of marks and there is no separate entrance examination.

2. Higher Degree Programmes (Code : HD)

M.E. in Biotechnology; Chemical; Civil (with specialization in Structural Engg/Infrastructure Systems); Communication Engineering; Computer Science; Design Engineering, Manufacturing Systems Engineering; Mechanical, Microelectronics; Software Systems; **M.Pharm.**

Duration : Normally four semesters.

Normal Input : Biotechnology - Any integrated first degree of BITS or its equivalent with adequate preparation in Biochemistry and Microbiology.

Chemical; Civil; Computer Science; Mechanical - Integrated first degree of BITS in the same discipline or its equivalent.

Communication Engineering - Integrated first degree of BITS in Electrical & Electronics/Electronics & Instrumentation or its equivalent.

Design Engineering; Manufacturing Systems Engineering - Integrated first degree of BITS in Mechanical or its equivalent or M.Sc.(Tech.) Engineering Technology of BITS or its equivalent with the requirement of taking certain additional courses.

Microelectronics - Integrated first degree of BITS in Electrical & Electronics/Electronics & Instrumentation/Computer Science/Physics or its equivalent.

Software Systems - Any Integrated first degree of BITS or its equivalent with specific prior preparation.

M.Pharm. - Integrated first degree of BITS in Pharmacy or its equivalent.

Note : For Higher Degree programmes, shortlisted candidates will be asked to come to Pilani for tests and interview at their own cost.

3. Doctoral Programmes leading to Ph.D. (Code : PH)

Applications are invited for Institute's Ph.D. programme in all areas of Engineering and Science disciplines.

Normal Input : Any Higher Degree of BITS or its equivalent. Any applicant with qualification equivalent to Integrated first degree of BITS will be first examined for suitability to one of the higher degree programmes of the Institute.

Shortlisted candidates will be called for a written test/interview for selections. Selected candidates will be given financial assistance in the form of either a fellowship of any government agency or of the Institute, project or teaching assistantship, full/partial tuition waiver or a combination of these.

Employed professionals having long experience and proven competence aspiring for Ph.D. programme will be considered under the 'Ph.D. Aspirants' scheme and will be allowed to pursue their research at their own locations of work.

II. DISTINCTIVE FEATURES OF THE EDUCATIONAL STRUCTURE AND SOME SPECIAL PROVISIONS

1. All programmes are of modular structure with several flexibilities like multiple point entry, transfer from one programme to another, possibility of doing two degrees simultaneously (dual degree) etc.

2. All students admitted to Group B programmes will be given an opportunity to work under the dual degree scheme for one of the Group A programmes, assignment being made by competition on their performance at BITS at the end of first year.

3. The Institute's well known PRACTICE SCHOOL option is available to all students working for every degree in Groups A, B and C and higher degrees.

4. While admissions are open without reference to caste, creed, class or sex, special consideration is given to candidates belonging to scheduled castes and scheduled tribes.

For details candidates must consult the Bulletin, which will be supplied along with the application form.

III. APPLICATION PROCEDURE

Application form and Bulletin can be obtained from the undersigned against a request on plain paper giving the name and code of the programme for which the application is requested, candidate's name, complete postal address with pin code, the required despatch mode and demand draft details, accompanied by requisite fee in the form of a crossed demand draft drawn in favour of **Birla Institute of Technology & Science (BITS), Pilani** payable at State Bank of Bikaner & Jaipur, Pilani (Code : 1398) or UCO Bank, Vidya Vihar, Pilani (Code : 0150) for Rs. 500/- (Registered Parcel Post) or Rs. 600/- (Registered Letter/Speed Post wherever speed post is available) or US $ 25/- or its equivalent (for sending to foreign countries by Airmail).

Deadline for submission of the completed application forms is 5.00 p.m. on 30ᵗʰ June, 2003.

May, 2003

**ADMISSIONS OFFICER
BITS, Pilani - 333 031 (Raj.)**